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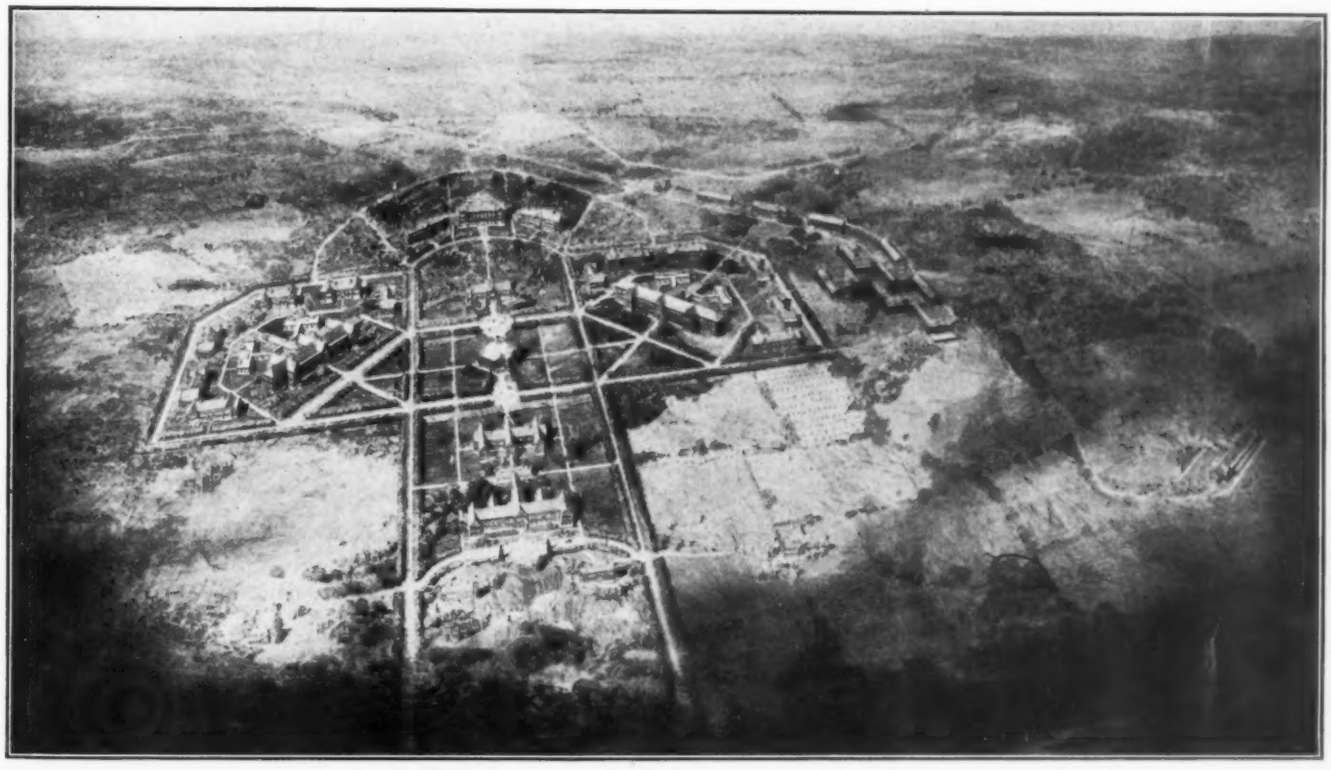
NEW YORK'S NEW STATE HOSPITAL

By EVERETT S. ELLWOOD, Secretary, State Hospital Commission, Albany, N. Y.

THE first state hospital for mental diseases which New York has erected in over twenty years was inaugurated last September, when Governor Alfred E. Smith dug the first spadefuls of earth for the foundation of the new Marcy Division of the Utica State Hospital.

Though the Marcy plant, for the present at least, will be a division of the Utica State Hospital, and more easily and economically administered because of that fact, it will to all intents and purposes be a new institution. The Legislature has authorized $2,000,000 toward its construction, and when completed it will house 3,000 patients. Contracts have been let already for nearly a million dollars' worth of work.

The Marcy hospital represents the first big concrete result of the work of the Hospital Development Commission. During the past two years it has studied the hospital needs of the state, coordinating the scientific, financial and construction branches of the state government on the task, and has laid out a program for systematic development over a term of approximately ten years.



General View of the Utica State Hospital, Marcy Division.

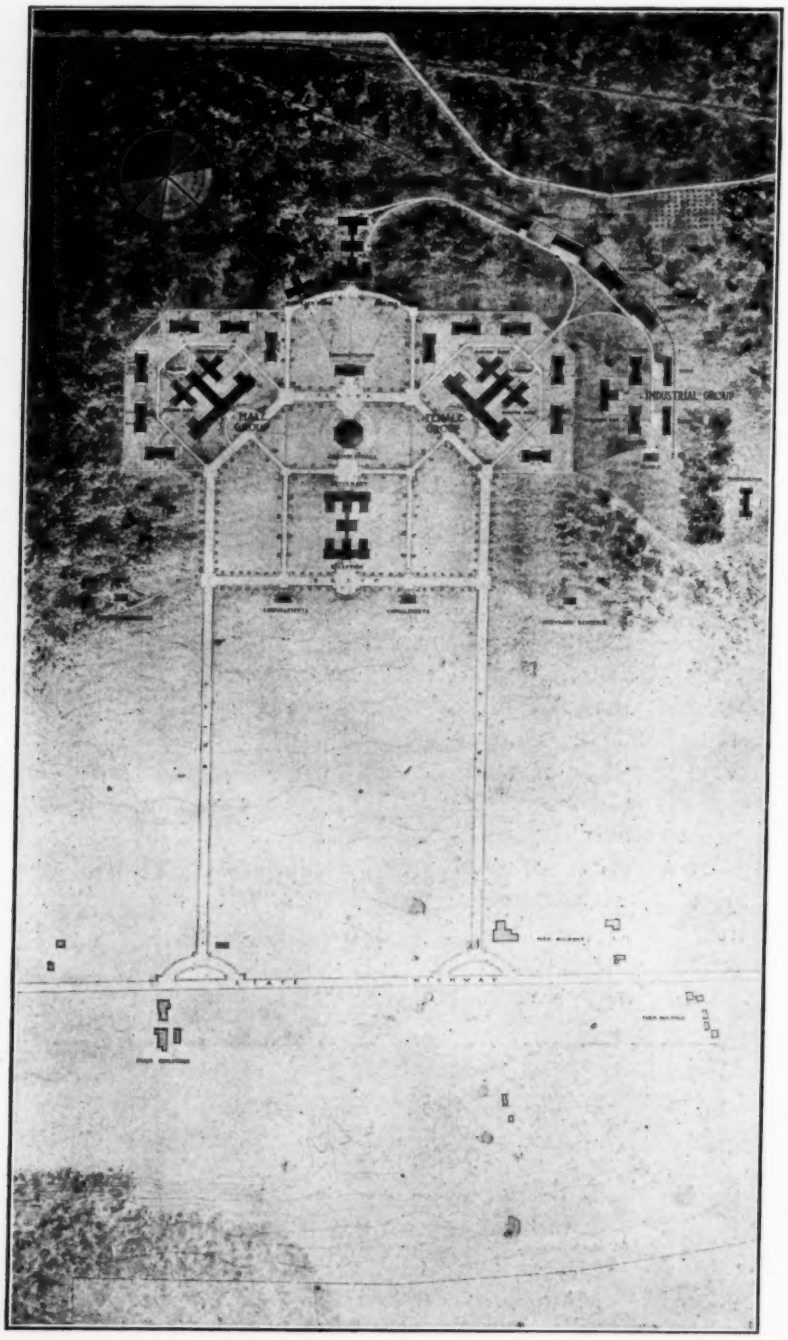


Fig. 1. Block plan of the Utica State Hospital, Marcy Division.

In designing the plans for the building and in their arrangement and equipment, the state architect, Lewis F. Pilcher, has very successfully applied the principles put forth by modern psychiatry in regard to housing, care, and treatment of mental cases. In construction, the Marcy institution will represent the best of current scientific thought. The new hospital will also be notable in another respect—viz.: it will be the first of such state institutions to be wholly constructed according to a prearranged plan, with a predetermined capacity. In the past the state hospitals have not been constructed on such a complete, well-seasoned plan, and consequently, piecemeal enlargements of what were originally small institutions have in some instances resulted in buildings that are both lacking in adaptation to their purposes, and difficult and expensive to operate and maintain.

It is a striking coincidence that New York's newest institution for mental diseases should be constructed as a division of the Utica State Hospital, which, when erected, was its first insane asylum. This was well expressed at the inaugural exercises by Dr. Charles W. Pilgrim, chairman of the New York State Hospital Commission: "A little more than three-quarters of a century ago what was for so many years known as the State Lunatic Asylum opened its doors in the city of Utica for the care of the insane. As this institution was the first one of its kind which the state established, it is only fitting that we should be here to dedicate what will probably be the best planned and equipped hospital in the country for the care of the insane. When the Utica State Hospital was originally planned there were only about 800 committed insane persons in the state, and they were cared for mostly in almshouses and in jails, with the exception of a few who were cared for by relatives and in private institutions. Therefore, it may be said that the Utica State Hospital started the great movement for taking care of the insane, which culminated in the passage of the State Care Act in 1890."

The site of the Marcy Hospital, on the northern slope of the upper part of the Mohawk valley, six miles west of Utica, is one of the best institutional sites in the state. Its selection was due to the fact that it promised to fill the needs of the district which the institution is intended to serve, as well as the needs and comfort of the employees who so often pass their lives and rear their families in the neighborhood of the work. The resolution passed by the Association of Medical Superintendents of American Institutions for the Insane in 1850, to the effect that such institutions "should be easily accessible at all times," is as pertinent today as it was when made. The Marcy grounds consist of 930 acres of land with sufficient slope for drainage. The soil is of the highest fertility. The grounds are bounded on the south by the barge canal and

on the north by the St. Lawrence Division of the New York Central Railroad. The higher central portion of the site will be occupied by the main buildings, which will face the south. The power house, storage buildings, and laundry will be placed to the rear in the small valley which crosses the grounds at the extreme north.

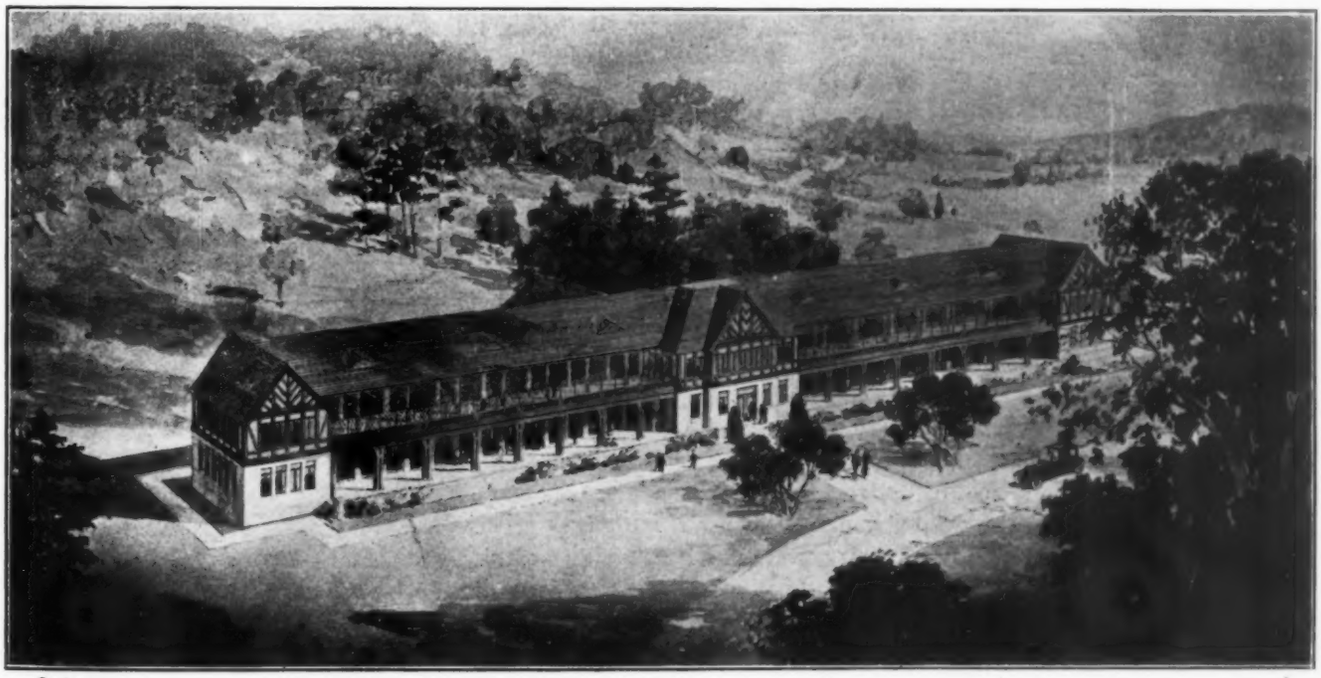
The water supply of the institution has been assured by the purchase of additional land to the north for the development of a large storage reservoir. From this reservoir the water will flow by gravity through the purification plant and will then be pumped to all parts of the institution.

By referring to the block plan (Fig. 1) one can readily appreciate the admirable arrangement of the buildings, which is well described by State Architect Pilcher: "The main hospital buildings are grouped in a scheme of design closely analogous to the Latin cross; the reception infirmary building forming the nave, the building for the disturbed, the apse, and the two chronic groups, the one on the left for the males, and the one on the right for the females, the transept. Continuing the metaphor,—the assembly building will lie midway between the porch of the nave and the crossing of the transept, while the administration building will occupy the same position between the transept and the apse. Southeast of these large main units, an industrial group is planned for the accommodation of 200 patient workers, and to the rear of this group and connected with it by a roadway and by a spur track from the St. Lawrence Division of the New York Central Railroad, the institutional laundry, the institutional power house, the institutional storehouse, and the mortuary. Turning towards the main entrance, the residence of the superintendent and the steward will be located, one on each side of the double driveway leading from the state road. Between them will be two buildings of 50-patient capacity each, for the accommodation of convalescents. To the east of these buildings, somewhat removed from the institution proper, there will be a hospital for the accommodation of 100 tuberculosis patients.

"Additional buildings will be erected later for the housing of institutional help other than the doctors, nurses and attendants; the only other buildings now planned, however, are two nurses' homes, dextrosinistral from the building for the disturbed, and a farm group of 200-patient capacity, which will be placed to the southeast of the State road."

The general plan of this hospital, as has been described, was developed in accordance with recommendations made after a very extensive study by the medical committee of the State Hospital Development Commission. This committee is constituted as follows:

Walter B. James, M.D., chairman, president, Academy of Medicine, New York; Charles W. Pilgrim, M.D., chairman, State Hospital Commission; George H. Kirby, M.D., director, New York Psychiatric Institute; Isham G. Harris, M.D., superintendent of the Brooklyn State Hospital; Carlos F. MacDonald, M.D., formerly



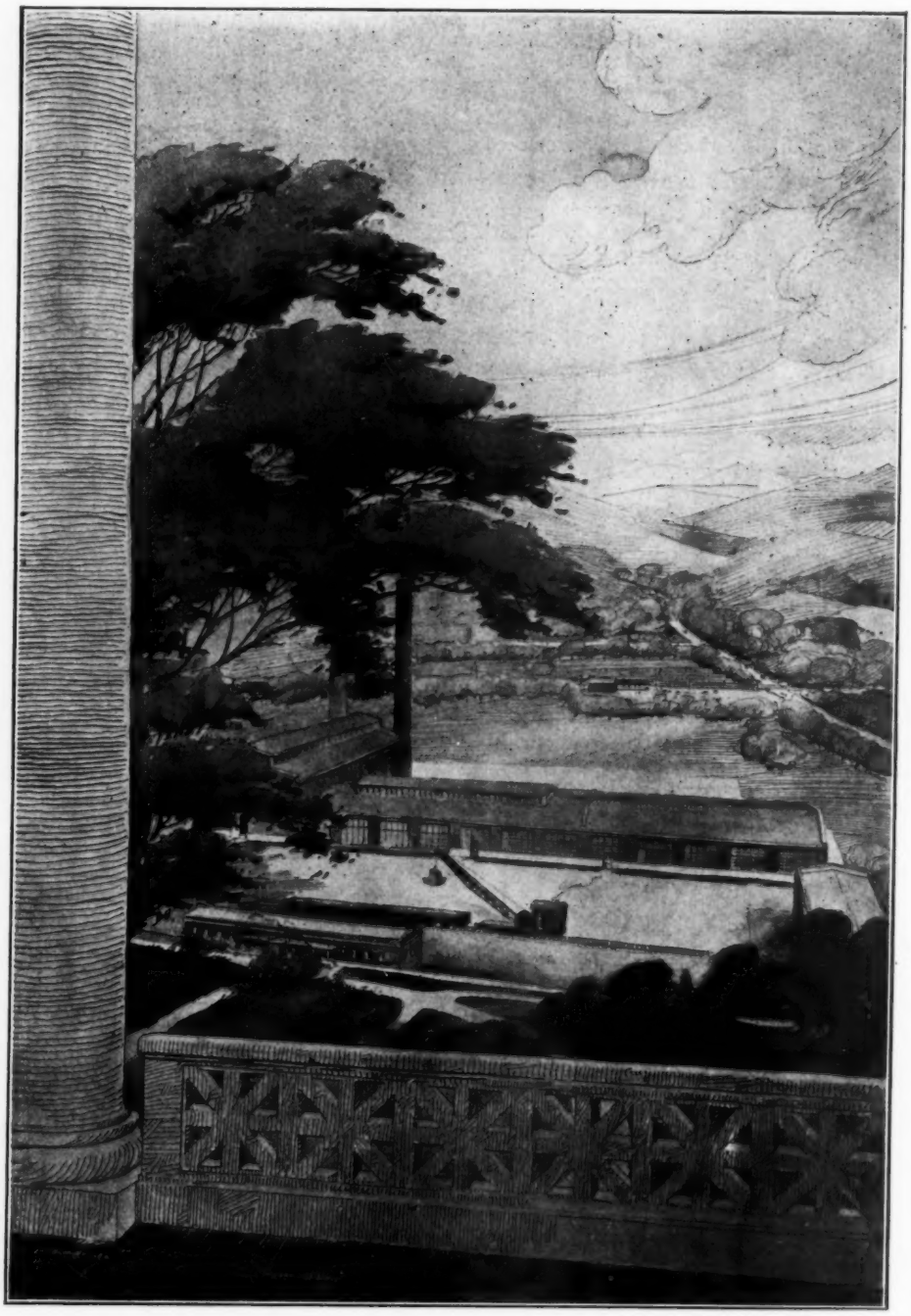
Tuberculosis Hospital of the Utica State Hospital, Marcy Division. Provision has been made in the plan of this building for intricate behaviorism classification and extensive therapeutic treatment of mentally diseased tubercular patients.

president, New York State Hospital Commission; Thomas W. Salmon, M.D., medical director, National Committee for Mental Hygiene; Frederick Peterson, M.D., formerly chairman, New York State Hospital Commission.

What has been said thus far pertains largely to the general layout and topographical features of the institution. Now let us consider the arrangement of the buildings and wards with particular reference to the provisions made for the care and treatment of the patients.

Building Arrangement

An earnest effort has been made to provide approved facilities for the most modern methods of treating various forms of insanity. In addition, the hospital spirit of cure is fostered in every building and ward. It is not only a humane obligation to the patients themselves but a distinct source of economy to the state, that as many patients as possible shall be cured, or improved, at the earliest possible date, and returned to their homes.



The back yard of the Utica State Hospital, Marcy Division. The power plant and the utility section are shown. In the distance the Adirondack watershed, the source of water supply for the institution, is located.

Those who are incurably insane, including the dementia praecox cases, will be given such care and treatment as will tend to raise the general level of their mental condition as much as possible. Recognizing the basic value of habit training for these deteriorating cases, which constitute over 50 per cent of the total patient population, an extensive program of reeducation especially adapted to such cases will be established and maintained. This includes curative work, or occupational therapy, prevocational training, gymnastic exercises, and other features which are of value in the rehabilitation of this type of patients. Special buildings for the work are included in the plan as outlined.

The committee of medical experts, after delving into every aspect of the problem, decided unanimously that the buildings of the Marcy Hospital should be arranged in seven groups. This will make it possible for the Marcy Hospital, as indeed it would make it possible for any other large modern institution for the care and treatment of medical patients, to institute a careful, scientific classification of patients, based on whatever principle might be thought most practicable, and thereby be in a much better position to render efficient therapeutic treatment to the patients.

Utica State Hospital, Marcy Division—Laboratory-Mortuary. "The torch and flame of the whole mental betterment problem is research." Provision has been made in this building for all of the necessities of laboratory experimentation; a museum record and history.

The buildings were arranged in seven groups as follows:

Group 1—Reception buildings	6%
Buildings for convalescents	4%
Group 2—Hospital buildings for the acutely sick	2%
Buildings for the infirm	8%
Group 3—Buildings for the disturbed, restless, and noisy cases	20%
Group 4—Buildings for the epileptic insane	3%
Group 5—Buildings for workers in the laundry and shops, and on the farm, grounds, etc.	40%
Group 6—Buildings for the quiet, clean and appreciative chronic class	14%
Group 7—Buildings for the tuberculous class	3%
	100%

The first group should consist of a reception building or buildings, and one or more buildings for those who are convalescent. It should have its principal outlook towards the south and be free from the view and noise of the buildings in which the chronic and excited cases are cared for. In fact, it should be possible to care for and cure many of the acute cases without having them come in contact with any of the unpleasant features necessarily associated with the care of the chronic and disturbed insane.

The size of the "reception hospital" will necessarily depend upon the admission rate more than upon the size of the hospital. Experience shows that the number to be cared for in reception hospitals is about one-third of the number annually admitted.

The question of separate buildings for each sex will also depend upon the size of the institution, but, as a general proposition, the committee recommended separate buildings for both the acute and convalescent cases. For the sick and feeble this question need not be given so much consideration.

The second group should consist of buildings for those who are acutely sick, for surgical cases, and for those who either have reached, or are approaching the stage of physical helplessness.

The first two groups should bear a fairly definite geographical relation to each other, as they will house the patients who require the most intensive medical care.

About three per cent of the state hospital population is tuberculous. These cases should be cared for at a little distance from the other patients, in one-story buildings of special design, having a southern exposure, a protection from northern winds, and accessible grounds so that much of the time can be spent out of doors in suitable weather. The tuberculous patients are provided for in group seven of the summary.

The remaining groups comprise very largely

the buildings for the care of the chronic insane. This is no less a medical problem than the care of the acute patients. In fact, it is often a more difficult one and requires the same high grade of knowledge and experience in solving it. It should be borne in mind, however, that, for psychological reasons the medical and nursing features should be emphasized more strongly in the care of the curable cases than in the care of the so-called chronic types.

By care in selecting the location of the administration building, the superintendent's residence, the staff house, and the nurses' home which should be near groups one and two, it is possible to make a well defined line of demarcation between the groups caring for the curable types, and those housing the chronic and disturbed. Such a separation is also facilitated by locating the amusement hall, the chapel and mortuary in the center of the institution. On the side of the site opposite to that occupied by the buildings for the acute, the remaining groups will provide accommodations for a great majority of the population as follows:

Group 3. Buildings for the disturbed, restless, and noisy, who constitute about 20 per cent of the population.

Group 4. Buildings for the epileptic insane, who constitute about 3 per cent of the population.

Group 5. Buildings for workers in the laundry and shops, and on the farm, grounds, etc., who constitute about 40 per cent of the population. These buildings should be so located as to prevent too much loss of time on the part of the patients in getting to and from their work.

Group 6. Buildings for the quiet, clean, and appreciative chronic class, who make up about 14 per cent of the population.

The power house, storeroom, and other service buildings are located on what might be called "a service street," or avenue, which should be approachable by rail so that supplies can be received in carload lots.

The question of floor space and cubic air space is one of great importance, particularly at this time when the cost of construction is so high that it is necessary to limit the size of the building insofar as is consistent with the purpose of the building and the health of its occupants. The medical committee made a thorough study of the subject and after conference with superintendents of state hospitals and the State Commissioner of Health, it adopted as its standard for housing the following requirements per patient:

50 sq. ft. floor space in dormitories.
40 sq. ft. floor space in day rooms.
14 to 15 sq. ft. floor space in dining rooms.
70 to 80 sq. ft. floor space in single rooms.

The size of the single rooms, viz.: from 70 to 80 sq. ft., may be considered meager, but it is advisable to make the single rooms small enough so that there will be no temptation to crowd two patients into what was originally intended for a single room.

The allowance, given above, represents the maximum space requirement, and whenever the ceiling is very high, or unusually efficient ventilation facilities are afforded, it would be safe to reduce slightly the number of feet allowed per patient. The number of single rooms should be sufficient to provide for fifteen or twenty per cent

Psychiatric Reception Hospital, planned for a Curative Clinic for persons afflicted with mental disease, Utica State Hospital, Marcy Division.

Custodial Building of the Utica State Hospital, Marcy Division. Laboratory-Mortuary of the Utica State Hospital.

of the population, varying with the character of the cases to be cared for.

The dormitories and dining rooms of the Marcy Hospital will be of medium size. It is planned to have the dormitories limited to a maximum of fifty beds, and, wherever it is deemed advisable to provide for more than fifty patients in any single dining room, the space will be broken up by dwarf partitions dividing the main room into groups of 50 or less patients each, thus providing a certain degree of privacy for the patients when sitting at the tables.

A complete modern state hospital must have a well organized out-patient department. Adequate provisions will be made at Marcy for the patients on parole to meet with their former physicians and the social worker of the hospital, to receive medical advice pertaining to their mental health, and instruction in regard to their program of living. The same kind of attention will also be given to individuals in the community who wish to consult with medical experts in regard to any phase of the subject of mental disease. In addition to the work done at the institution, other mental clinics will be maintained in the various centers of population throughout the district which the hospital serves.

In describing the plan for the Marcy Hospital I have gone into considerable detail inasmuch as these plans represent the consensus of expert opinion and are the result of serious and extended study. They should, therefore, be of value to authorities in other states upon whom has been placed the responsiblity of planning and overseeing the construction of institutions designed for the care of mental cases.

It would be an error to conclude that New York's new hospital cannot be improved upon, for the science of medicine is not a fixed science, but is constantly changing and progressing. Therefore, an institution which today may be the embodiment of the best of medical thought and experience, will sooner or later have to be remodeled in certain features to make the care and treatment accord with future findings of psychiatry.

NEW FEATURE OF TOLEDO DISTRICT NURSE WORK

The Toledo District Nurse Association which has been doing excellent constructive health work among the poor and uneducated of the city, has introduced a new educational feature of inestimable value. To the duties of Household Educator has been added that of teaching classes of children, ranging in age from seven to fourteen, the principles of right eating. At these nutrition classes which meet once a week at the dispensary, charts are used showing by the picture method what should and should not be eaten. Talks and stories on health subjects are a part of the program, and the children are given weekly charts to be filled out at home giving information as to what they have eaten each day, how much water they have drank, how much play time they have had, how much sleep, and how many hours they have spent in school. Each child is given a thorough examination by a physician, is weighed once a week, and is measured for height every three months.

The Household Educator's general line of duties is to instruct mothers of families concerning the proper choice, purchasing, and cooking of food, to aid them, when necessary, by supplying either funds, or the essential food, to obtain a well balanced ration, and to instruct them in all phases of practical household economics. During 1919, the Household Educator made 978 calls.

A VISUALIZATION OF WHAT HOSPITAL STANDARDIZATION MEANS TO A COMMUNITY*

By FRANK E. CHAPMAN, Superintendent, Mount Sinai Hospital, Cleveland

I DO not like to think of a hospital as an inanimate object. I want to think that a hospital cannot be standardized. I want to believe that a hospital is an idea, not something inert—a building of brick or stone. The most mediocre physical development, properly imbued with an idea of what a hospital should be, can make an exceptionally fine institution.

The Basis of Standardization

Any standardization program, no matter what the medium of expression, is predicated upon the assumption that man is fundamentally good, and that he is attempting to do the best possible with the facilities at his command. Working upon this assumption, it has seemed incumbent, in view of very definite need for improvement along certain lines, to present to various institutions a somewhat different point of view than the one they enjoy, attempting to make them realize certain deficiencies they have—deficiencies which exist not through any desire on their part, but which are due to a seeming inability to understand very definite obligations that are theirs by reason of their position in the community.

I shall take up seriatim the three general classifications outlined.

Obligations of an Institution

It is an old saying that no organization is any greater than the staff that mans it. May I be permitted to plagiarize and say that no hospital is any greater than the vision of its administrative body? It has been my privilege to look intimately into the affairs of approximately two hundred hospitals in the past year, large, small, and medium-sized—good, bad, and indifferent—benevolent and vicious. The preeminent point developed by this investigation is the absolute lack of understanding on the part of boards of trustees of their obligation to their institutions and to the community that they serve. In a large percentage of cases the indicated attitude, if not the spoken one, would show that they felt the hospital did not extend beyond the four walls; that they were primarily interested in the patient, or in some instances, in the patient's doctor; and that the state of this patient before he came to the hospital, or his disposition when he left, was of no interest to the institution as a whole.

Permit me to present a slightly different point of view as to the obligations of the administrator of a hospital. It is my understanding that a hospital which deserves the title "community hospital" can not do other than be vitally interested in the entire communal health problem. It should be the desire of the administrative body to make the institution the health center of the community it serves. It should be the desire of the board of trustees to create in the minds of the members of the community the thought that the hospital is a composite of a large part of the medical wisdom of the community. It should be their desire to have the community feel that the members of the staff are appointed for the reason that they have demonstrated to the administrative body their ability to administer to the wants of the patients in their respective specialties, and for that reason are worthy of every confidence of the patient. It should be the desire of the administrative body to have the influence of the hospital felt throughout the community, not in the number of patients that are treated within its walls within the shortest possible time, but the character of the work done. It should also be their desire to have the knowledge gained by such a performance permeate the community and be productive of better health for the whole community.

If these points of view are correct, and if the administrator is conscientiously trying to serve to the maximum of his ability, then, as administrator, he has very definite obligations to the community. These obligations, as I see them, are as follows:

1. It is absolutely incumbent on the administrative body to know that every individual permitted to practice within the walls of the institution is as proficient as it is humanly possible to be in his or her respective line of work.

2. In addition to his or her medical knowledge, this individual must always carry uppermost the best interests of the patient, thoroughly alive to his responsibility; in fact, he should typify those things that we admire and honor in the true physician. You will please understand that neither an open nor a closed staff organization is recommended. There are certain conditions presenting themselves in various communities that do not permit of as close an organization as may be desirable from an administrative point of view, and

*Read at the convention of the Ohio State Nursing Association and League of Nursing Education, Toledo, O., May 6, 1919.

it is submitted that the open or closed staff question is not a pertinent one. But a controlled staff is very strongly advocated. By a controlled staff is meant that there be a thorough knowledge of what each individual member of the staff is doing in the institution and without. Such a knowledge can be obtained only by a systematic perusal of the work of all individuals practicing in the institution—not by picking out isolated cases, but by an analysis by broad-minded individuals of the continuous performance of each individual. These things I think are pertinent.

3. The next obligation is that the administrator must offer every facility consistent with good medical practice to the members of the staff for the proper diagnosis and care of cases. In these advanced medical times it is almost inconceivable that an up-to-date practitioner of medicine can make a diagnosis without the aid of the x-ray machine or the laboratory; yet may I say to you that not 10 per cent of the hospitals in this country have a laboratory equipped to make even the simplest kind of laboratory diagnosis? And I question if 10 per cent of them are equipped to give medical roentgenological finding. In talking with the personnel of hospitals as to why these deficiencies exist, one is met with an excuse of lack of funds, lack of desire on the part of the staff, lack of appreciation on the part of the board of trustees of the need, and various other excuses too numerous to mention. Let me suggest that there is not a community in this whole land capable of maintaining a hospital that has not some one individual who, if properly approached and made to understand the need for such facilities, would not willingly finance the installation of such equipment and see to its maintenance. It is simply a lack of understanding on the part of one, and a lack of desire or energy on the part of the other.

4. Another obligation of the administrator is to know that, after a capable staff has been appointed and the facilities for proper diagnosis and care of disease furnished, the staff make use of the facilities that are provided. This, of course, is covered in part in the first obligation, but it is a point that can stand emphasis.

5. Still another obligation of the administrator is to know that the members of the staff are contributing, in a small way if you please, the result of their experience to the medical world. The hospital offers the only possible clinical laboratory there is. Is it not a shame that such facilities should be wasted, and that the material developed should not be presented to the medical world, permitting it to enjoy the observation of others? Please understand I do not mean that members of the staff must do a lot of self-advertising on mediocre or hashed-out material. If the staff as a whole could present one original thought a year, imagine, if you can, the cumulative effect. There are over six thousands hospitals in the United States and Canada. Six thousand new thoughts in medicine would do much toward alleviating the suffering of the human race.

These, as I understand them, are the obligations of the administration. There are in addition, of course, the physical and administrative obligations, but these are not pertinent to the present thought.

Obligations of the Staff

The noblest calling in the world is, in my opinion, represented in the work done by those who care for the sick. The ideals that are essential to such work and the intimate contacts that are made in the practice of such a profession produce a status for the profession that is approached in no other walk of life. By reason, therefore, of the pedestal that is builded, the example is so pronounced that, when one does fall from grace, the reaction is all the more despicable. To my mind, one of the most distressing things of life is the professional man who has forgotten the ideals of the profession he has embraced, and who has prostituted himself and his profession by the application of sordid economic procedures to his daily professional life. Another type that presents itself is the man who has graduated from a medical school and who, after graduation, is perfectly content to drift along in an aimless sort of way, treating patients as he was taught, with no attempt on his part to improve his knowledge of his profession, except by what limited experience he himself may develop. These are the two types of practitioners that make it possible for some of the cults to develop the idea that the medical profession are fighting.

I should like to give you my idea of what an ideal hospital staff means. First of all, to be efficient, a medical staff, like any unit of any organization, must coordinate. To do this, it is absolutely essential that an *esprit de corps* be developed, and, if it is developed, members of the staff will automatically consider it a privilege to be associated with the institution. They will be proud to do everything possible to contribute to the good name of the hospital, and automatically to contribute to their own fame. I should like to feel that they are vitally interested in the welfare of every other individual who practices in the institution, that they not only will do nothing to harm, but that they will do everything to help,

their confreres—not only men of equal rank in the institution, but the younger man, also, with a view to helping him practice medicine on a higher plane than would be possible without their help. It would be ideal if they would take sufficient interest in their profession and the institution they are serving to see to it that every possible advantage is offered to the medical man in training in the institution, and to the nurse who is spending valuable years of her life in perfecting herself in a kindred profession. If such a spirit can be developed in the staff, whether it is a closed or open staff, the patient in that hospital cannot help but benefit by such a spirit; and, after all, is it not the patient that we are interested in more than anything else? With this end in view, there are certain very definite needs of an institution that must be furnished by the administration, but that are absolutely impossible of perfecting without the cooperation of the staff; and it is these things that the standardization program has most to do with.

Medical Records Lacking

One of the saddest commentaries on medical practice in institutions is the absolute lack of records of medical performance. Members of boards of trustees are, as a rule, successful in their personal commercial life. In their business they secure an accounting system that is efficient, one that will show them at a glance where they stand, but in their philanthropy they permit a performance more precious than the performance of dollars and cents, and much more complicated than the performance of any manufacturing business, to go on without any records worthy of the name. It is suggested that, for the protection of the patients, for the protection of the hospital and for the protection of the physician, a definite record be kept at all times, showing just what has been and is being done for the patients.

On surgical cases it is suggested that administrative bodies insist upon the making of a preoperative diagnosis. The result of operation should then be watched, to see what percentage of cases of each operator demonstrates the correctness of the preoperative diagnosis.

It is suggested that it is part of the obligation of the institution to be able to show to the patient in after-years what procedure was instituted in the hospital for his care. With the type of records kept in most institutions, this is an absolute impossibility. It is believed, further, that if members of the staff are obliged to record in detail just what is done, they will be more careful what they do. It is believed that efficiency methods can be applied to the practice of medicine just the same as they can be applied to other walks of life, and that, if members of the staff realize that these methods are applied not in an antagonistic state of mind, but rather that any suggestions made are advanced constructively, with the better men of the individual's performance, and the care of the patient as the primary motive, they will not only welcome such action but give it their hearty cooperation.

Bear in mind, however, that such a procedure has to be carried out in a tactful way, always considering the rights of the individual, and always remembering that "to err is human." Do not expect a perfect performance. Much can be excused if the motive is right, and if, after a series of analyses, you can demonstrate that an individual has made a conscientious endeavor to function, you can then be assured that your efforts are productive of good. Experience has demonstrated that the establishment of a proper system of medical records is oft-times combated by the staff at the off-set and that there is great difficulty in such an establishment, but the same staff, after having been compelled to do things along these lines and having seen the benefits of such a system, would be loath indeed to return to the old haphazard method formerly employed.

I should like to feel that the caliber of my staff is such that they would not countenance a medical practice that did not include a checking up of their clinical findings by every means possible, and that therefore they would not practice in an institution that did not furnish them every possible laboratory facility, pathological, serological and roentgenological, thus making it incumbent upon the administrator of the hospital to furnish the pertinent things for scientific diagnosis and care.

Relation of Community to Hospital

The feeling of the community in a very large percentage of cases is commendable. As a rule they believe that their hospital is the quintessence of all that is good in hospital practice, and they do not countenance very much discussion of the status of service rendered. Is it not therefore the obligation of the hospital to make this a fact as well as a theory? In a large percentage of cases hospitals go to the community for support. The community has reason to believe that the hospitals is functioning as efficiently as it is possible for an institution to function.

The trend of the time is improvement, much of the improvement, in fact all of it, coming through education. I believe the time is past when we can hide our performance under the cloak of secrecy. I believe the time of inefficient hospital practice is

passing, and I believe it is passing because of a better understanding on the part of boards of trustees and of the community as a whole as to what good hospital practice is, and a growing demand that hospitals which look to the public for support shall conduct their affairs in such a way as to furnish as good medical and hospital practice as is possible to secure. That the public is beginning to be interested is evidenced by inquiries from members of communities, by the character of articles in leading magazines, and by the growing interest in affairs of hospitals by men of ability in commercial life. Just let me present another phase, but one that much be reckoned with—the fact that health insurance under state supervision is becoming nation-wide. This will make it incumbent that beneficiaries be returned to the productive state as quickly as possible. It is to be assumed that this can be accomplished most quickly in an efficient hospital. Does it not follow that hospitals will be graded as to their equipment and performance?

Shall the "Big Stick" Be Wielded

If these things are true (or if only partly so), is it not better for hospitals to set their houses in order of their own volition, rather than be compelled to do so? I should like to think that we do right because we want to, but unfortunately this is not always true, and it may take, in the words of one of America's greatest idealists, a "big stick" to bring us in line. That there is need of improvement no one who is at all conversant with the true situation will gainsay. I question whether if some communities knew internally some of their hospitals, they would be as free with their support.

You may think that most of the things I have set forth herein are intangible. Please recall that I prefaced my paper by saying I believed a hospital was an idea. I do not believe that the things we want to accomplish can be accomplished by a process of revolution, but that constant hammering on the part of all interested in a better hospital practice is bound to produce an evolution of thought that will but react to the betterment of the practice as a whole.

My sole thought in giving this message is to try to instill a higher ideal, if possible, of what the medical profession means, and express the hope that, by example and through intercourse with others, those who desire to improve the character of hospital work will spread the ideals of better hospital practice, until the cumulative effect will compel compliance on the part of those institutions that now have neither the vision nor the apparent desire to do so.

THE INFLUENCE OF COLOR FROM A THERAPEUTIC STANDPOINT

Some interesting observations on the influence of color therapeutic standpoint especially in relation to the colors in a hospital are made by a writer in *The British Journal of Nursing*. Attention is called to the subtlety and elusiveness of a "color scheme" when we go beyond the mere act of perception. Often it only requires the proximity of two colors to entirely alter the tone of both. Then, too, how can we tell that all shades are perceived in the same way by different individuals? Of course color blindness, in a positive sense, does exist, but there also may be gradations as regards our individual perceptions.

In regard to "color schemes," nature is the best teacher. All the colors of the spectrum and all the shades and tints of these colors are found in nature, and yet the whole is one complete harmony. From a therapeutic standpoint, not only the color itself must be considered but all the gradations of that color, the tastes, temperament, and physical condition of the person whom it will influence, the way in which he may perceive any given shade, and perhaps even the association with it that may exist in his subconscious mind. All this leads to the conclusion that if color were to take an important place in therapeutics, certain rooms in the hospital would have to be set aside for certain forms of disease. For instance, a color suited to a very excitable patient would be quite different from that suited to a patient exhibiting symptoms of another kind.

This leads us to the deeper question of whether it is the color actually visualized which influences the patients or its complement—art color. If it is the complementary color, many of the accepted theories on color in the hospital are shaken. Gray, for instance, which has been such a popular color for the sick room, has black for its complementary color. Color visualized outwardly appears to produce its complementary color inwardly. For instance, if one looks for a time at a certain shade of red, closes the eyes, and then directs them on a piece of white paper, a shade of blue-green will appear. Now will it be this color or the red which will influence the person? It seems to the author that the sense of color created by the person will affect him most, and that therefore the color which should be selected as part of the treatment for some condition should be that which will evoke inwardly the complementary color judged to be most suited to the patient's state. On this assumption, a red room, after the first few minutes, would actually produce the effects which one would have expected from the complementary shade of green. In support of such a theory we might again refer to the supposed "restfulness" of gray; yet what is more depressing than a gray day? What is there restful or soothing in a sky of thick, soft, gray clouds?

The effect of color is realized when we consider that much of the feeling in a masterpiece is lost when we look on a representation of it without color. May it not be the feelings which those colors create within ourselves which give to the pictures their power? We may find in the pictures of the old masters object lessons in new fields for intellectual activity on the influence of color upon the mind, and, through it, upon the health of the body and the cure of abnormal conditions.

It is one of Montesquieu's subtle remarks that the more wise men you heap together, the less wisdom you will obtain.—Amiel's Journal.

THE RELATION OF THE LIBRARY TO THE HOSPITAL

By JULIA E. ELLIOTT, Director of "The Indexers," Chicago

THE library is the literary research laboratory of the hospital and bears the same relation to effective service as its other laboratories. Indeed, it may be a more potent factor in progress than any one other department, because, properly administered, it contributes to the progress of every other department. Its function is to furnish information on all hospital activities, from the work of the chief of staff to the newest intern, or nurse, and from that of the superintendent to the humblest janitor's helper.

How can the library, the literary research laboratory of the hospital, contribute effectively to the progress of every other department?

The most potent factor in education is the interchange of ideas and experiences. The ablest men in the medical profession are the quickest to seek and benefit by the experiences of their colleagues. Expert clinicians, as well as interns, nurses, and administrative staffs must augment their experience by the experience of others.

How can this scientific information be more easily obtained than by consulting the library, which consists of a live collection of authentic printed matter?

Every hospital is an educational institution, whether it consciously aims to be or not. It stands in the relation of a postgraduate school to the members of its staff and it is bound to furnish adequate equipment in every department, in order that through the continuous education of that staff it may adequately serve its patients.

The most potent factor in education is the interchange of ideas and experiences. In the medical profession that is effected, first, through personal contact and clinics; second, through medical societies and associations; third, through the medium of the printed page; fourth, by the dissemination of literature through libraries. The limitations of the first and second methods of exchange are self-evident, and are overcome by the publication of transactions of societies, private papers and stenographic reports of clinics, thus establishing the third medium. For an individual to own all the literature that he may want to consult at any time is manifestly impossible, both from the standpoint of expense and space. Each doctor will own, in time, his own special collection of journals and books, but he must look to a larger organization for the literature that he uses only occasionally. Hence the fourth method of exchange is an economic necessity, and central libraries must be established to supplement the libraries of older practitioners, and to supply the younger men who have not yet been able to acquire a private collection.

What more logical place can be found in a small community for this central library than the hospital? If a community has more than one hospital, then there should be cooperation and a division of subjects in developing the libraries, taking into account the special service which each is endeavoring to render. If this plan is not feasible, the local medical society should establish a central library, possibly in connection with a local public library, in which case the hospitals may limit their library activities to the immediate needs of the resident staff, and draw upon the society library as a cooperating institution.

This central library outside of the hospital does not, however, stand in place of the hospital library, which should bear the same relation to the central library as classroom libraries in a college or university bear to the main library. An attractive, restful reading room, light, well ventilated and centrally located, equipped with a few standard reference books and the most important current medical journals, is still essential in the hospital, in order that the spare moments of members of the resident staff may be utilized if they desire, and that all may be encouraged to continually supplement their daily experiences with a knowledge of the practice of authoritative leaders.

Functions of a Hospital Library

The functions of a hospital library, whatever its size, may be divided as follows: 1, service to the visiting staff; 2, to the resident staff, interns and nurses; 3, to the administrative staff; 4, to the patients.

1. Service to the visiting staff.—The ablest men in the profession are the quickest to seek and benefit by the experience of their colleagues. In the greatest clinics in the country you hear men eminent in their chosen specialty asking advice of visiting clinicians on some stubborn case that has defied all their science and art. The great clinicians are the great students. Not one goes

to clinic or private sick room where a puzzling case awaits him, without reviewing what his colleagues have done under similar circumstances. The first function, then, of the hospital library is to place at the staff member's command the very latest and best information on any subject about which he needs to know.

Perhaps tomorrow the chief of staff is to conduct a clinic designed to illustrate the different procedures for benign and malignant pelvic tumors. The librarian, who keeps posted on the schedule, promptly gathers from all sources the most important literature on the lesions and procedures under consideration; first, for the chief surgeon to review the literature to which he intends to refer in his clinic; second, for the interns year. The librarian, knowing this recurrence of a dread disease is expected, has collected all the recent literature, in anticipation, not only from the library files, but reprints of importance from other sources. With the material at his elbow, even the busiest intern can find time to keep informed.

2. Service to the resident staff.—The younger men come to a hospital as interns, or into a community as practitioners direct from college, where they have had libraries at their command. Their use of these libraries may have been limited for lack of time, but at least they have learned something of the use of books and their value. At the most critical period in their experience, when the guidance and the inspiration of instructors is

An attractive, restful reading room, which is light, well ventilated, and centrally located, at the Mayo Clinic, Rochester, Minn.

to familiarize themselves with the pathology and technique in advance. This review of the literature may modify the surgeon's technique; may warn of unsuspected anomalies found by a colleague in a similar case; may describe complications not before met with in his experience. For the intern, the advance study quickens his perceptions, helps him to recognize variations in technique made necessary in an emergency, to grasp with keener intelligence the procedure followed, to compare it with other methods, and to understand better the postoperative course.

Or, an epidemic of influenza is imminent. Perhaps some discovery has been made since last withdrawn and before his own experience has begun, they are thrown upon their own resources, or, in the case of the intern, are dependent upon the visiting staff members for the continuance of their education. Not all students may have the advantage of serving their internship under the great leaders in the profession. The nearest they can approach it is through the printed page, which delivers the message they seek. It is the right of every graduate student to find in the hospital which he serves and which in turn agrees to serve him, the means of keeping in touch with the advancing thought of his professional leaders and colleagues. The function of the hospital li-

brary in relation to the intern, therefore, is to supply him with the best literature in every case or procedure in which he may be personally concerned; to afford him an opportunity to pursue his study of any particular subject in which he is interested; to place at his disposal the best current medical journals for general reading; to make his internship, in fact as well as in theory, an all round postgraduate course.

The pathologist, laboratory technician, roentgenologist, and nurses have, in their turn, positive claim upon the library to supply the authoritative literature upon their subjects.

3. Service to the administrative staff.—A new record system is to be installed. The training and experience necessary to classify and index a library is exactly what is needed to classify and index records. These records in manuscript are merely unpublished clinical reports and are as much a part of the library as the published reports of other hospitals. The organization of these records, together with that of the plates and records in the x-ray laboratory, should be closely correlated with that of the books in the library; for example, in a study of a series of cases to determine the reason for a high mortality, the records of other hospitals and communities are essential as a basis of comparison. The former information is obtained from the index to the case histories; the latter through the catalogue of the books. The importance of a uniform method of handling all of these sources of research is at once apparent, while it also facilitates the use of the hospital records in the daily routine.

A new filing system is to be installed in the office. As if by magic, the superintendent finds on his desk two or three excellent books on office management, borrowed from the nearest public library, and he is surprised to find that this same training and experience which is essential in indexing books and records is equally valuable to him in planning and installing an adequate correspondence file.

Perhaps the trustees are contemplating changes in the building, the rearrangement of wards or of kitchens, or the erection of a new wing. The librarian gathers plans and suggestions from every possible source.

The library is the literary research laboratory of the hospital, and should not be a collection of ancient, dust-covered volumes hidden away in dark corners. The illustration shows the stock rooms of Mayo Clinic, Rochester, Minn.

4. Service to the patients.—The patients' library has been thoroughly discussed in a preceding article in this journal and need not be elaborated upon here.

There is not an activity in the hospital that can not derive benefit from a wisely managed library with a very small collection of volumes but with an administrator who knows sources.

It is very plain that the library we have in mind is not a collection of ancient dust covered volumes, hidden away in dark corners or behind locked doors or in some inaccessible room, with

books piled one upon the other from floor to ceiling, or in double rows on shelves one behind the other, or in every conceivable way to discourage their use except by the most persistent and patient research student. On the contrary, it is a live collection of printed matter, wisely selected, properly organized, and intelligently administered. For a hospital it consists, first, of the best current journals, selected to represent each service. This literature, well indexed, gives the very latest conclusions of the most eminent men in the profession on subjects desired, at a moment's notice. Second, a few good standard books; possibly two or three hundred will cover the needs of the average hospital. Third, pamphlets and reprints that are not duplicates of articles in journals on file. These, with the bound volumes of the journals are the essentials.

As the library grows in size and usefulness, other collections may be added; photographs and clippings of the occasional articles of value in the ephemeral magazines; hospital supply catalogues; museum specimens; everything that may contribute to the educational value of the hospital. These books and pamphlets, classified by subject and thoroughly indexed, make it possible to find at a moment's notice whether the thing you are looking for is in your library. They are kept dusted and accessible in open cases. There is nothing sacred about them. They are expected to yield their information at any time and any place to any one who needs it, and the quicker they are worn out from intelligent use, the quicker the library justifies itself.

This library is not limited by four walls and the content of its own shelves. It is connected with all the outside agencies that can in any way contribute to its needs: the larger library in the nearby city, or in the state capital; or, the Surgeon General's library in Washington, from which may be borrowed, for the cost of transportation, any volume in that vast collection. It is in touch with book stores, publishing houses, and every agency that makes it a business to furnish information quickly.

A quiet corner in the Lakeside Hospital Library, Cleveland, Ohio.

Throughout this article reference has been made to the administration of this library. A laboratory with the finest equipment, without a trained pathologist or technician, is worthless. The same is true of a library. This need not, however, discourage the hospital with small resources, because just as it may install for its own use a small laboratory for the simplest tests, and depend upon outside laboratories for the more elaborate ones, so each hospital may have a small library with the essentials for daily use, supplement its material by drawing upon other libraries, and depend upon some outside agency for expert organization and administration. Every hospital library may have the kind of service described. How it may be adapted to hospitals of different sizes and localities is another story.

WHAT SHOULD PRIVATE PATIENTS PAY?

By S. S. GOLDWATER, M.D., Director, Mt. Sinai Hospital, New York

IT IS the duty of hospitals which undertake the care of both the poor and the well-to-do, so to adjust their charges that money donated for the benefit of the needy will not be applied for the benefit of the prosperous. Such a misapplication of funds can only be prevented by a clear conception of sound hospital policy and by efficient accounting methods. It is because one or the other of these is lacking that many hospitals today are carrying private patients for less than real cost, properly calculated, and thus are serving, however unconsciously, as instruments of social injustice.

What are the elements of sound financial policy with regard to private patients? Hospitals control facilities for diagnosis and treatment which do not exist elsewhere. It would be inhumane to deny the use of these facilities to any social group or class. That all classes have a right to share in their use, no one will deny; but not all are entitled to share on the same terms. Without discussing underlying principles of justice or of social administration, we may lay down the principle, generally accepted in this country, that the charges for hospital service should be such as to deprive no one of necessary service. It is in accordance with this principle that municipalities appropriate money for the support of hospitals, and it is this belief that induces philanthropic individuals voluntarily to contribute generous sums toward the erection and maintenance of hospitals. Funds so given may properly be used for rich and poor alike; they may with justice be used and consumed by the poor, but if used by the rich, must be used without depletion. In other words, the well-to-do patient must pay his way, while the poorer patient may be permitted to pay in proportion to his ability (which is equivalent to saying that the poorest patients need not pay at all).

Three Items of Payment for Private Patients

Now, if the well-to-do patient is to pay his way, there are three distinct items of payment which must be covered. The first is payment for medical service, and inasmuch as this does not ordinarily enter into the financial calculations of a hospital, nothing more will be said about it here; the hospital should permit reasonable fees to be charged and may leave their collection to the physicians. The second item of payment for which the well-to-do patient is responsible is the cost of maintenance, *i.e.*, the patient's pro rated share of the current expense of conducting the hospital. The third item of payment, an item which it is the purpose of this article to bring forward and to emphasize, is *the private patient's pro rated share of interest on the capital investment of the hospital.* This item is frequently omitted in calculating the cost of caring for private patients.

It may be argued that inasmuch as the hospital does not actually pay interest on capital, no interest charge should be exacted from any patient. The hospital may not actually pay interest, but if it does not collect interest from its private patients, it deprives the poor of benefits to which they are entitled. Donations to the hospital, whether for construction or maintenance, are intended to benefit the poor. The volume of free work that is practicable depends on plant and on income. If a contribution is invested in a ward building or in any of the essential accessories to ward service, the benefaction operates as intended. If sums donated for hospital support are invested in income-bearing securities and the income thus obtained is devoted to the support of free work, again the benefaction operates as intended. But if a donation is used to provide rooms for well-to-do patients, the poor are deprived of all benefit from the transaction, unless the hospital collects from its private patients something over and above the mere cost of current maintenance, or in other words, unless it collects interest on that part of the hospital's capital which is applied to private patients' use. Any interest thus collected must, of course, be utilized for the support of the charitable work of the hospital. In "Hospital Accounting and Statistics," that splendid monument to the life-long public service of W. V. S. Thorne, a method of calculating the relative cost of ward and private patients' service is shown which unfortunately leaves entirely out of account this important element in private patient cost. How should this cost be calculated? How should the hospital accountant estimate the proper interest charge against the occupant of a private room?

If that part of the hospital building which private patients occupy equals, let us say, one-sixth of the cubical contents of the whole hospital plant, it is clear that there should be charged against the whole number of private patients at least one-sixth of a sum representing interest at the current rate on the value of the whole hospital plant. But this is not all. The private pa-

tients' share in the use of other parts of the hospital must be included in the calculation. For purposes of illustration, let us consider the laundry. Will it be sufficient, in the case we are imagining, to charge against private patients one-sixth of the capital invested in the laundry building? Let us see. If each private patient requires three times the quantity of linen used by a ward patient (not an unusual ratio), then the private patients' share of laundry expense (and this applies to current expense as well as to capital expense) should be reckoned as follows:

Ward patients (five-sixths of the whole number of patients)	5 laundry units
Private patients (one-sixth of the whole number of patients; but one private patient equals three ward patients)	3 laundry units
Total	8 laundry units

Now let us take the argument as far as we have gone and use concrete figures. Of eight units of laundry expense, three units, in our calculation, are chargeable against private patients. Assuming that the capital sum invested in the hospital laundry is $40,000, there is chargeable against private patients for laundry service alone an interest item of six per cent on $15,000 (three-eighths of $40,000) or $900.

General House and Property Expense Item

In estimating private patients' share of current expenses one of the items to be distributed is the important item of general house and property expense. To quote "Hospital Accounting and Statistics" once more, "The distribution of general house and property expense among the different branches of service is based upon the relative cubical contents of those parts of the building or buildings occupied by each of the services mentioned" (referring here to ward service, private patients' service, dispensary, and social service). Now private patients do not literally occupy any part of the laundry, but a certain part of the laundry is used for their benefit; for the purpose of distributing current house and property expense, this proportion of the laundry must be assumed to be occupied by private patients, and therefore the cost of its maintenance must be charged against them. And what is true of the laundry is true of other central departments—of the engine room, the kitchen, the storerooms, the nurses' home, the servants' dormitory, the laboratory, the superintendent's office, the housekeeper's apartment, the clinical record room, etc. All of this is recognized by hospital accountants in dealing with private patients' share of current expenses, but there, as a rule, the application of the principle ends. It is highly important, however, that the same principle of distribution be applied in determining the sum properly chargeable against private patients as interest on capital invested in plant.

In order to show clearly the grave importance of the item of interest, let us imagine that we are about to erect a modern building designed exclusively for occupancy by private patients, and supplied, as such buildings usually are, with kitchen, operating rooms, baths and laboratories for general use, reception and sitting rooms for patients, guests and nurses, roof garden, balconies, elevators, utility rooms, ventilated corridors, fire escapes, and a reasonable number of individual private baths and toilets. Such a building will include not less than eight thousand cubic feet of construction per patient. An additional allowance of seven thousand cubic feet, as each private patient's share of power plant, laundry, kitchen, laboratory, administration building, nurses' home, store rooms, dormitories, etc., would probably not be excessive. We have then, a requirement of fifteen thousand cubic feet of construction for each private patient. If, under present conditions, a unit cost of eighty cents per cubic foot for new construction be assumed (one used to say thirty to forty cents for high grade hospital construction in the days before the war, but those happy days are no more!), our capital outlay for each private patient will be $12,000. Six per cent interest on this sum is $720 per annum, or approximately $14 per patient per week. It is evident that unless this sum is paid by each private patient, in addition to the full *cost of maintenance*, the private patient profits at the expense of the poor. In the case of old hospital buildings the proper interest charge would be less, but the principle remains the same. How many hospitals in the United States today are figuring their charges to private patients on a basis which is financially and socially sound?

Just a word about the pro rating of current expenses, because unless this is thoroughly understood the pro rating of capital charges will not be understood either. "Hospital Accounting and Statistics" says that "The percentage charged against ward patients and private room patients is based upon the number of days of treatment furnished in each service, modified by well known facts; for instance, the fact that the private room patient requires more professional care than would be necessary if he were located in a ward; also the important fact that his food and the preparation of it cost very much more than that

of the ward patient." This is a valuable reminder. However, one cannot help wondering whether the "modifying facts" referred to are as well understood as they ought to be.

Below are extracts from the calculation sheets of two representative hospitals, operating similar plants in the same city. In each of these the number of days of private room service is about 10 per cent of the whole number of days of hospital care. These hospitals estimate their private patients' share of important overhead items as follows:

	Hospital "A"	Hospital "B"
Administrative expense	14%	21%
Pharmacy	20%	10%
Food	21%	18%
Kitchen	12%	18%
Laundry	12%	23%
General house and property	13%	19%

The striking discrepancies are not accounted for by equally wide variations in the character of the service of these two institutions. These figures indicate the need of both expert service and the most extraordinary alertness in the making of such calculations. If the calculations are made without the utmost care and skill, injustice will be done and, as a rule, the resulting hardship will fall upon the poor.

TYPHOID IMMUNIZATION OF HOSPITAL NURSES

"Typhoid infection of nurses is not of uncommon occurrence," says Dr. Harold B. Wood, late acting epidemiologist of the New York State Department of Health, writing in *Modern Medicine*. In fact the direct transmission of typhoid fever from patients to nurses is one of the greatest factors in the spread of the disease. Although nurses are carefully instructed in the care of patients having typhoid, sufficient caution is not used to guard the nurses themselves from infection. In 1916 the typhoid case rate for the upstate cities of New York was 39.3 per hundred thousand population, while the case rate for nurses in the hospitals was 390.7—which shows that the disease is ten times more prevalent among nurses than among the general public.

To learn the attitude of hospital superintendents toward obligatory immunization, a questionnaire was recently sent to the superintendents of 254 hospitals in New York State outside of New York City. Replies received from 110 of these hospitals may probably be regarded as representative of average conditions and intentions in the northeastern part of the United States. These hospitals had 2,900 nurses, averaging 26 nurses to a hospital. Typhoid had infected seven nurses and caused one death in 1916; in 1917 there were twenty-four cases with one death among the nurses; and in 1918 there had occurred three cases before December 1. Undoubtedly nearly all these nurses had become infected within the hospitals and probably from the patients whom they were treating.

In regard to the number of nurses immunized during the past two years, the superintendents replied that 1,278, or approximately 4 per cent of the nursing staffs, had been immunized. Forty-seven superintendents admitted that they had not immunized any nurses, in spite of the fact that six months previous to the sending out of the questionnaire the value and need of immunization had been brought to their attention by the state department of health.

Of the superintendents who held opinions, fifty-nine declared in favor of hospitals requiring nurses to become immunized against typhoid. Although vaccination is recognized by the entire medical profession as the most effective method of preventing typhoid fever, twenty-nine superintendents are opposed to making it compulsory for nurses in training, while four desire to make the protection optional with the nurse. Those favoring the measure are the larger hospitals, with average staffs of thirty-one nurses, while those who oppose it are the smaller hospitals, averaging twelve nurses only. It is interesting to note that the hospitals opposing immunization had had relatively just twice as many cases of typhoid among their nurses as had the hospitals favoring the protective vaccination.

Any method or act which conserves human health and efficiency is a practice worthy of universal adoption, and the fact that immunization prevents typhoid and helps to avoid suffering, death, and lost efficiency should make it a universal practice in all training schools. It is not advisable to wait until typhoid has overtaken a community and then look about for means of a cure. Rather is it infinitely wiser to adopt measures of preparedness which will prevent or overcome dangers which may arise. The fact that a community has had no typhoid in the past is no proof that a sudden epidemic may not occur at any time from an imported carrier. This accident happens only too frequently. After the outbreak has occurred it is too late to consider the protection of the hospital staff. After a nurse is regularly assigned to the care of typhoid patients it is equally too late. Probationers substituting for regular typhoid nurses just for an evening have become infected by their lack of care in handling infectious material and the failure to sterilize their hands.

The danger of typhoid infection of nurses exists not alone within the hospital in which they receive their training. Called to attend all kinds of medical cases and live under all kinds of conditions in every locality, they are exposed to the contraction of the disease from their patients, from typhoid carriers, or through the agencies of flies, foods, milk, or water.

Typhoid immunization can most conveniently, economically, and advantageously be done when the nurse begins her term as probationer. The danger of her contracting the disease after leaving the hospital, the precautions which she must necessarily use in handling typhoid patients, and the fact that she may become a potential carrier if she is not extremely careful in her methods, should be explained to her. Immunization will not prevent her contracting the disease, but it will at least prevent her becoming a carrier. It should be required of every employee of every hospital or public institution and should be given when the employee begins service or training.

Blessed is the healthy nature; it is the coherent, sweetly cooperative, not incoherent, self-distracting, self-destructive one.—Carlyle.

There is no heroic poem in the world but is at bottom a biography, the life of a man; also it may be said, there is no life of man, faithfully recorded, but is a heroic poem of its sort, rhymed or unrhymed.—Carlyle.

HEALTH CENTER FOR NORFOLK, VIRGINIA

By MAXWELL HYDE, Architect, New York City

THIS project had its inception in the recognition by the Judge of the Juvenile Court of the need for medical aid in solving the problems of the delinquents and dependents coming under his jurisdiction. Many times the cause of the delinquency is found to have its roots in physical infirmities. It soon became evident, after consultation with the medical authorities of the city, that the scope of the work as originally planned should be broadened and the project became in reality a health center for the entire community —both child and adult.

Health Center Defined

Dr. Livingston Farrand, Chairman of the Executive Committee of the American Red Cross, described a health center as "the physical headquarters for the public health work of a community. As such, it is the practical and concrete expression of the interest of the community in the health of its inhabitants. It constitutes a business-like way of associating health activities, both public and private, under one roof, in daily touch and in complete mutual understanding.

"The health center thus represents the latest step in the evolution of community health work, and answers the demand for efficient conservation of effort in bringing together important but hitherto undefined health campaigns, such as those for the prevention of tuberculosis, venereal diseases, mental diseases, industrial diseases, and above all the vitally necessary modern effort for the conservation of child life. In turn, it offers new possibilities of relating these volunteer activities to the official health work of the city, county, state and federal authorities."

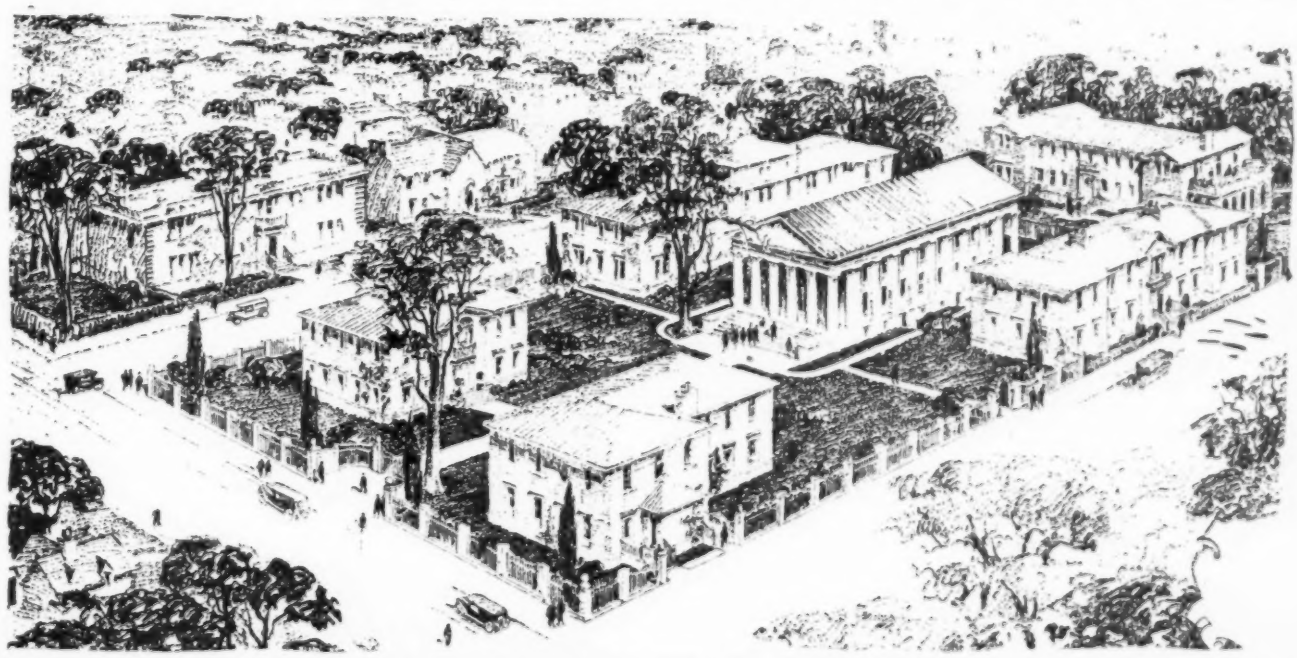
As far as we are aware this is the first complete and comprehensive health center planned for this country, which at the same time is related and has as part of the group, the Juvenile Court and Detention Home.

The relation of public health and hygiene to the general economic circumstances of the community are obviously of the greatest interest and importance. Mr. Charles A. Beard, Director of the Bureau of Municipal Research in a letter in reference to this project, says: "There is absolutely no question but that it will be possible for Norfolk, if those plans are carried out to take the front rank among cities of the country in the public health movement."

Financial Loss Due to Disease

"It is not alone the saving in health and lives which will certainly result, that makes this proposal of interest and importance, but as the result of such saving, the economy in municipal expenditure for health, educational, and allied fields of government work.

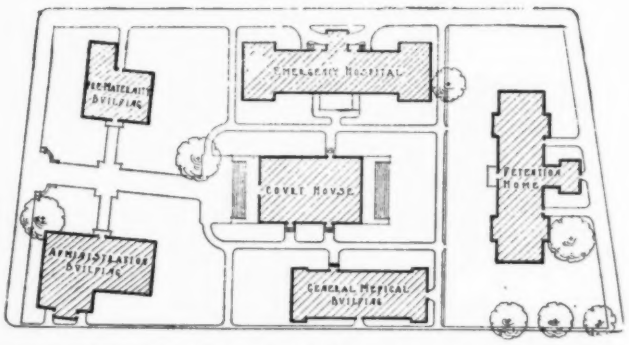
"It may be of interest to you in considering the economic aspects of public health work, to note the recent estimate of the yearly cost to the



The Norfolk Health Center which includes as part of the group the Juvenile Court and Detention Home, is the most complete health center planned for this country.

state of Illinois of sickness and death by communicable diseases. The Illinois State Board of Health estimates the per capita loss as $2,467 and the total loss to all the people of the state, $154,881,685, a loss which efficient health service would almost completely eliminate.

"The emphasis which your plan places upon child hygiene is certainly warranted also from the standpoint of economy. Former estimates place the cost of elementary school education at about $23.00 per capita in the United States and the annual loss in school attendance in this country at about 39,000,000 days. Fully 25 per cent of this loss is due to sickness and physical defects, to say nothing of the loss because of elimination, non-promotion and attendance. If is safe to say that the program which you have in mind will pay its own way in preventing this great economic loss. This has been proved over and over again."



Block plan of the Norfolk Health Center, showing the relative location of the various hospital and court buildings.

In a report on Five Years of Mouth Hygiene in the Public Schools of Bridgeport, Conn., Dr. Alfred C. Jones states "that covering a period of five years there was a reduction of retardation of pupils of 50 per cent."

Few people realize the cost in money which is only one of the evils of retardation—of the reeducation of retarded children. By actual figures the following statement holds true:

Cost for reeducation in Bridgeport, 1912, equals 42 per cent of entire budget.

Cost of reeducation of Bridgeport, 1918, equals 17 per cent of entire budget, showing the remarkable saving of 35 per cent of entire school budget.

In the Rochester Sickness Survey it was found that there was an average of $2.00 per day wage loss. An annual loss of $1,288,000.00.

Dr. I. R. Wile, Vice President of the Sociological Section of the American Public Health Association, estimates that the total loss to the United States is $500,000,000 in wages alone per year. Add to this another $500,000,000 for attendants, special food, medical service, making a total annually of 1,000 million dollars.

Taking into consideration the admitted necessity of our producing to maximum capacity if the United States is to hold its place in the competitive field of industry in the world market, it should be evident to all producers, both employer and employee, that any project which minimizes the enormous wasteage of labor due to illness must be not only a public but also a specific business economy and a matter of paramount national importance.

The plan comprises the following buildings:

I. The Court House. This is the old academy building, remodeled to meet the needs of the juvenile court and the court of domestic relations.

II. The Detention Home, which is to house the juvenile dependents and delinquents until they shall be permanently committed, or other disposition made of their cases by the court.

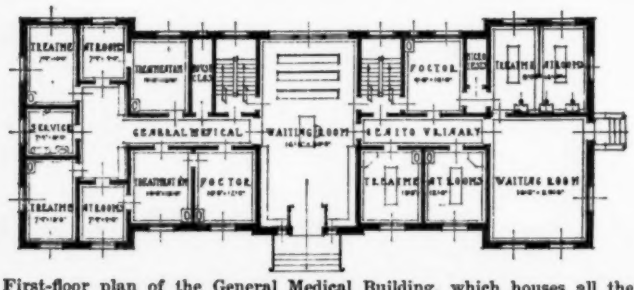
III. The Emergency Hospital which is a police or accident hospital and has little relationship to the health center as such.

IV. The Pre-Maternity Building. This building we prefer to call "The Children's Building" as here is done the pre-natal work and also the work in pediatrics of all children up to those of school age.

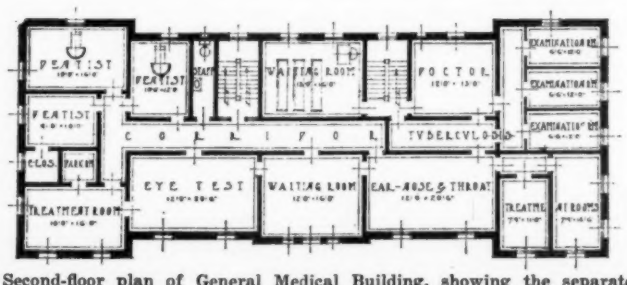
V. The Administration Building which includes the laboratories and the office of the health administrator of the city and his staff, central administrative office and record office of the health center.

VI. The General Medical Building which houses all of the clinics and is the center of the active dispensary work.

We have attempted in designing this project to keep in mind the importance of not changing the character of the design of the Old Academy



First-floor plan of the General Medical Building, which houses all the clinics and is the center of the active dispensary work.



Second-floor plan of General Medical Building, showing the separate stairs, doctors' office, and waiting room for the tuberculosis department.

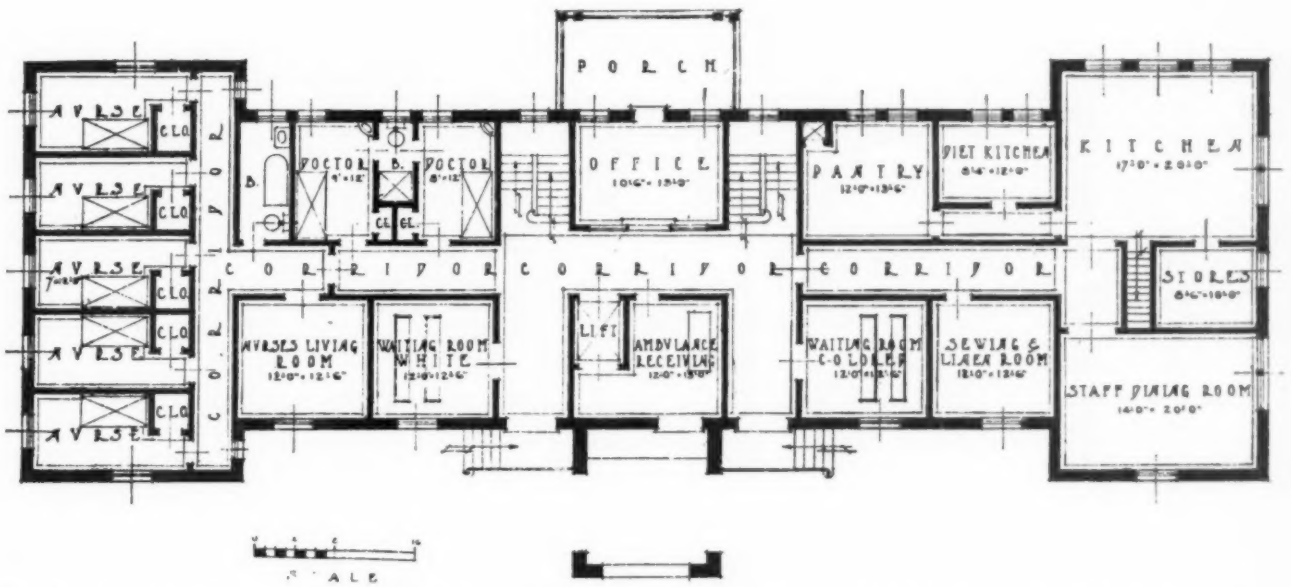
which has been for so long a landmark of this neighborhood.

We have felt that as far as possible the exterior of the buildings should be as little as possible institutional in character, and have therefore used a colonial domestic type which lends itself well to this purpose.

Wear and tear on buildings of this character is very great and they should be constructed of the most substantial materials, even at a somewhat greater initial expense—for this will be more than compensated by economy in upkeep, and repair, and safety in case of fire.

A central heating plant is to be installed in the basement of the detention building, which is to furnish heat for the entire group.

I. Court House. The Court House which is of substantial construction and pleasing design



First floor plan of the Emergency Hospital which is a police or accident hospital, and has little relationship to the health center as such.

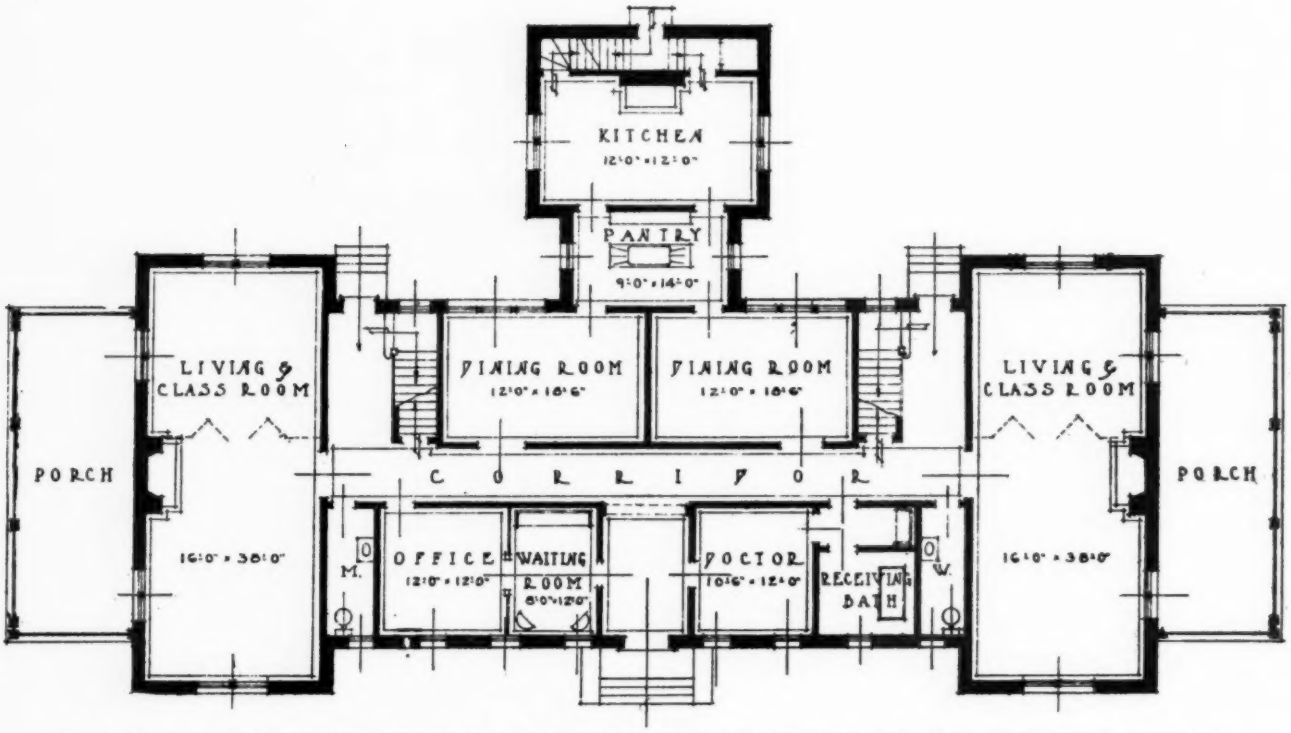
will, when remodeled, have on the first floor the court room, the judge's office, waiting rooms for blacks and whites, and the necessary offices for the probation officers. In the basement will be the detention rooms for those who are awaiting trial. The substitution of a detention room for the usual cell is a plan which has the hearty approval of Dr. Kirschwey, the distinguished authority on penal institutions, and is considered by him a great step forward in court administration.

The rooms for the psychiatrist are attached to the court in the basement. On the second floor is located a meeting room with a seating capacity of about two hundred fifty people, which it is proposed to use for various meetings in connection with public health activities, parents' meetings, and other meetings of general public interest. This room can also be used for instruction purposes when the lecture room in the children's building is not large enough. It will also serve as the exhibition room, which is essential in any public health campaign.

II. Detention Building. In the design of this building we had the close cooperation and advice of Dr. Hastings H. Hart of the Russell Sage Foundation, who has had a vast experience in the building and administration of this type of building. The sketches of the plans were submitted to many institution heads in various parts of the United States and their advice and criticism embodied in the final plans. The difficulty in planning a detention building is to arrange for the large number of segregations which it is necessary to make, without having too large a building. We have found that there should be not less than seven segregate units. The number of children in each division varies considerably at different times. Our plan allows of a very flexible arrangement. If at any time for example, there should be a very large number of young dependent children or older delinquent girls, it is a simple matter by setting certain of the doors to achieve the necessary segregation.

The basement of the building is to contain the heating plant for all of the other buildings, the necessary store rooms and janitor's closets.

On the first floor is the general office, the waiting room, the examination room where the doctor examines all incoming cases, and the receiving bath and toilet. There are two living rooms and two class rooms so arranged that by means of folding doors two large rooms will result, which can be arranged for technical training or



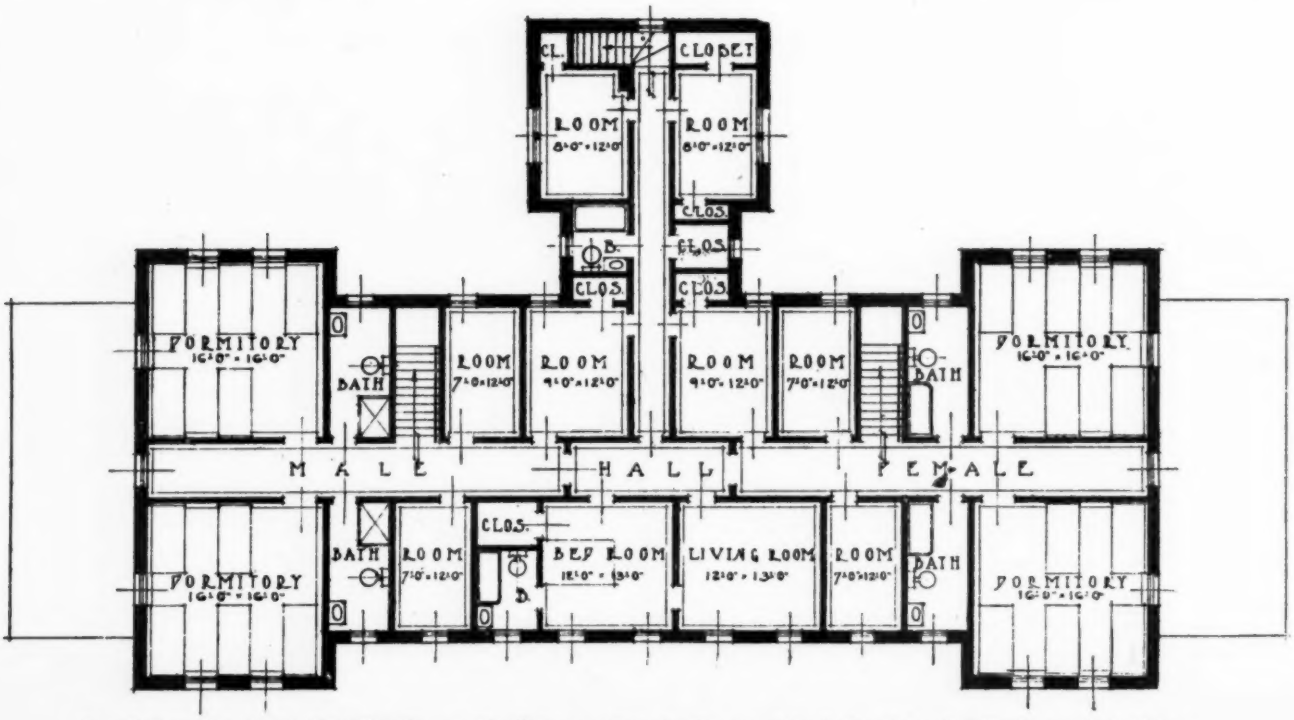
First floor plan of the Detention Home which is to house delinquents and dependents until they are permanently committed.

any other purpose. There are two dining rooms and a large well ventilated kitchen. Two play porches are important features of this plan.

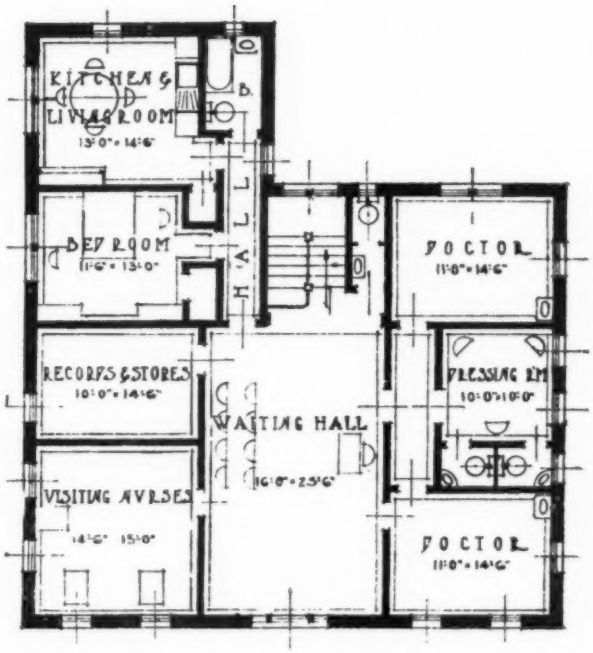
The second floor contains the living quarters for the superintendent and the various bedrooms and dormitories. One of these rooms is to be set apart for those cases needing special study and observation by the psychiatrist.

III. Emergency Hospital. This hospital is to be essentially an emergency or police hospital mainly for accident cases. It is not intended to be an organic part of the health center. A room with four beds for children has been provided to take care of such tonsil cases as may come to the clinic, where it is found necessary to keep the child over night.

The first floor is devoted entirely to receiving room, nurses' quarters, administration purposes,



Second floor plan of the Detention Home. The living quarters for the superintendent and the dormitories are located here.



Second floor plan of the Pre-Maternity Building, showing the three-room model flat consisting of kitchen-living room, bedroom, and bath.

and the kitchen, diet kitchen, etc. It is a constant cause of criticism that the kitchen and its dependencies are not given sufficient importance in hospital design; we have, therefore, located them in an excellent position on the first floor.

The ambulance receiving room is to be so arranged that minor surgical dressings can be done here and the patient immediately discharged, where possible.

In the basement is to be located a space for the ambulance, and room for its attendant, also sterilizing rooms, storage, etc.

The second floor is divided into two sections, one for whites, and one for blacks, and again resubdivided for male and female cases.

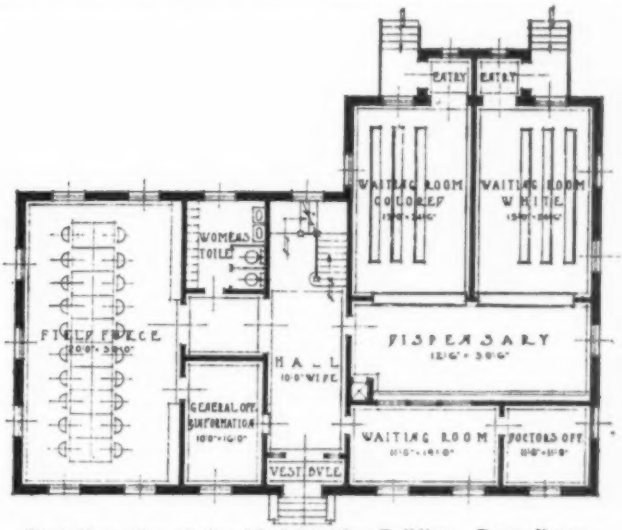
The five rooms marked private rooms are not essentially "private" but are to be used for cases needing isolation and more quiet than could be found in the dormitories. On this floor is also the recovery porch with southern exposure.

The bed capacity of the hospital is thirty.

On the third floor is a complete operating unit, consisting of operating room, sterilizing room, anaesthetic room, doctor's office and wash-up room. The operating room faces north and the entire unit is well ventilated and isolated.

IV. Children's Building or Pre-Maternity Building. This building is to be used both as a maternity center and also for pediatric work—for children up to school age. Recognizing the diffidence which deters so many pregnant women from going to large institutions, we have designed this building to have more the appearance of a large cottage or home than a clinic. The interior is to be brightly decorated, the furniture comfortable and domestic in character, placed as informally as possible, and the entire atmosphere friendly and homelike.

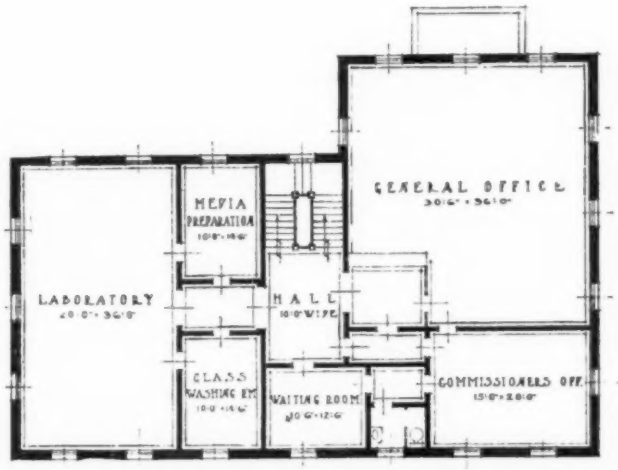
The visitor can enter by the front door, or if she chooses, by the more private entrance at the



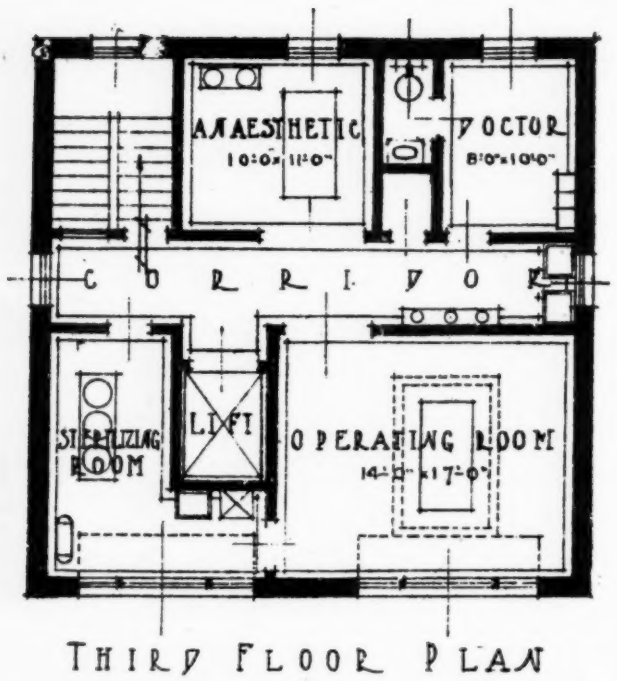
First floor plan of the Administration Building. Drug dispensary, waiting rooms, and report room for the city field force are here.

rear. She enters a large waiting room where she is met by a social worker who takes her social history before ushering her into the doctor's office. Adjoining the waiting room is a nursery where the children who so often accompany the visiting mother, are to stay while she is in the building. Convenient to this is a toilet room.

In the lecture room the expectant mothers are given instruction. A large plate glass window permits those in the waiting room to watch what is going on in the lecture room; their interest is stimulated, their curiosity awakened, and they are only too anxious to get the much needed instruction. This lecture room is to be equipped with the necessary apparatus—sinks, table, scales, etc., and around the walls open shelves for



Second-floor plan of the Administration Building, showing the executive offices and the general office for the city health department.



Third floor plan of the Emergency Hospital, where a complete operating unit of four rooms is to be located.

the display of babies' garments and fabrics, so arranged that the women can have easy access to them. It has been found that interest in the display of inexpensive dainty infants' clothes will bring the mother back again and again.

After the woman's social history has been taken, she is conducted to the dressing room with its necessary toilets, where she is prepared for examination in either of the two doctors' offices. These two offices are so arranged that not only can they be used as examining offices, but also for treatment rooms.

On the second floor is another dressing room and two more doctors' rooms. A room is provided where the visiting nurses can prepare their reports and keep in touch with their cases. Here also is a model flat, consisting of combination kitchen and living room, bedroom and bath. This is to be furnished with carefully studied and well selected furniture and equipment, in order to teach the women that it is not necessary to spend large amounts of money, if knowledge and care are used in the buying. Each article is to be carefully marked with its purchase price. The bedroom also can serve the double purpose of rest or recovery room, as should be required.

It is also proposed to use the lecture room on the first floor as an instruction room for midwives, an essential part of any constructive maternity work.

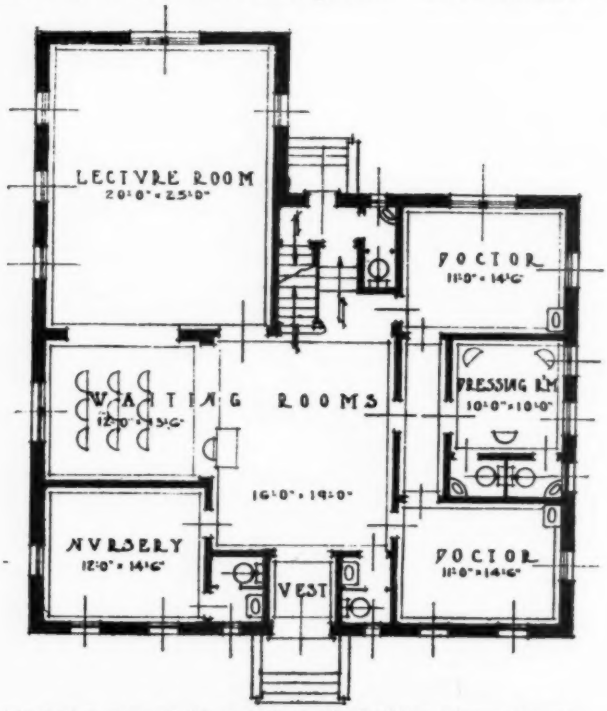
V. Administration Building. The Administration Building contains on the first floor the drug dispensary with waiting rooms for whites and blacks. It has a separate entrance so that those using it have no connection with the administration part of the building. A dumbwaiter leads to a room in the basement where material can be kept in bulk. A space is provided for the doctor who does the school vaccinations.

Here also is the general information office and general record room and the large room where the field force of the city health department prepare the reports. On the walls of this room are cabinets for the health records and reports, and for the keeping of the necessary literature distributed by the city health department.

On the second floor are the executive offices of the city health officer, and adjoining it the general office for the health department of the city. Here also is the laboratory for the city and the health center, with the necessary adjacent preparation rooms and glass washing rooms. On the roof are the animal rooms used in connection with the experimental work done in the laboratories.

VI. General Medical Building. In this building are located the various departments which comprise the general medical and examination work and the dispensary work of the health center, exclusive of the departments for the work of children of pre-school age and for pre-natal work.

The basement contains a complete x-ray department, where it is proposed to do not only the x-ray work for the health center but also for the private physicians of the city. The experience of Bridgeport, Conn., is that this work not only carries the expense of the x-ray department but also shows considerable profit. The balance of



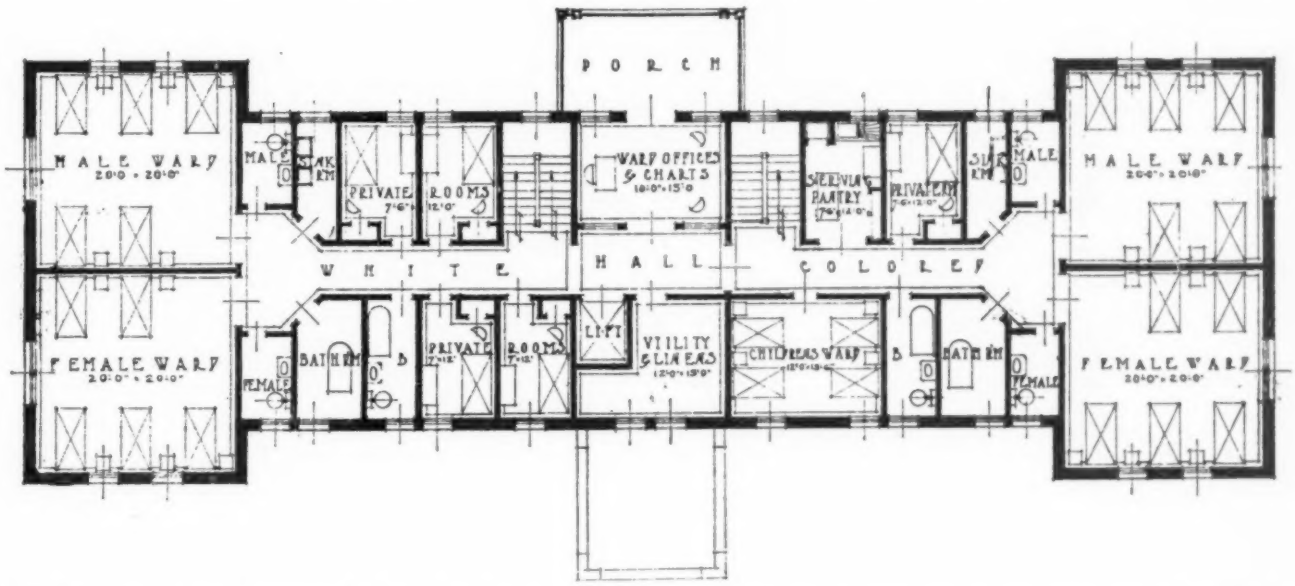
First floor plan of the Pre-Maternity Building where the prenatal work and the work in pediatrics of the young children is done.

the basement is devoted to the orthopedic department, comprising mirror and gymnastic rooms. general orthopedic apparatus room, foot baking room, dressing room and doctors' office. The general toilets for men and women will also be on this floor, as well as locker rooms for the attending physicians and nurses.

In order to avoid too large a plant this building has been so designed that the same spaces can be used for various purposes at different times. It was also decided after careful consideration that in addition to the general waiting room on the first floor it was advisable to have secondary waiting rooms in connection with each separate department. The visiting patient enters a large well lighted and ventilated waiting room. In the center, controlling the entire room, is the desk where the first record is taken and the patient given necessary directions. To the right is the genito-urinary department—so arranged with a separate entrance that it can be used at night as a male clinic when the rest of the building is not in use. This same space is also to be used as the gynecological department. It consists of a waiting room, doctor's examining room, four treatment rooms, so arranged that seven patients can be treated at once. In addition there is a small microscopic room so that tests can be immediately made and the results given to the patient without delay. The stairs leading to the tuberculosis department are so placed that if there is need for a heavy service the tuberculosis rooms can be used ih connection with the genito-urinary section.

X-ray work for this department is to be done in the basement. One of these rooms can be used as a cystoscopic room. To the left is the general medical department consisting of doctor's office, service room with sink, sterilizer, instrument cases, cupboards, etc., six examination or treatment rooms, as may be required. The character of use and arrangement of time of use of this department will have to be decided by the medical authorities administering the health center. The arrangement of these rooms by means of intercommunicating doors allows of much flexibility and adjustment. They are to be used for all general medical examination and treatment.

There are two stairs leading to the second floor, one for general use and one to serve the tuberculosis department. For this division we have a separate waiting room, doctor's office and three examination rooms. The other stairs serve the dental department as well as the divisions for eye, ear, nose and throat. Three dental rooms are provided, one of these rooms being a sound-proof extraction room. There is an eye testing room sufficiently large to test a number of cases at once a treatment room for eye cases, a doctor's office and small operating room, and a general ear, nose and throat treatment room which is to be partitioned off so that a number of cases can be given simultaneous treatment.



Second floor plan of the Emergency Hospital. This floor is divided into two sections, one for blacks and one for whites, and resubdivided for males and females.

SELL YOUR HYPO WASTE

The sale of hypo "waste," discarded plates, old x-ray tubes, and various pieces of apparatus, by the London Hospital, London, England, has netted the institution over $400 in the last six years. The hypo "waste" is collected in a cask and sold to a refining company. The radiographs, amounting to many thousands per annum, are classified by the radiologist, and those discarded are put aside for at least six months, and then sold at the market price of glass.

CREATING A MINIATURE WORLD

By MARY HAMMOND BARKER, Supervisor of Kindergartens, Worcester, Mass.

IF I were cast away on a desert island with a cargo of children to be educated, I think (at this moment) that I would almost rather have materials to work with than books. Children seem to get so much more out of an hour's work with materials on which they may "work their will" than an hour's work with a reading book.

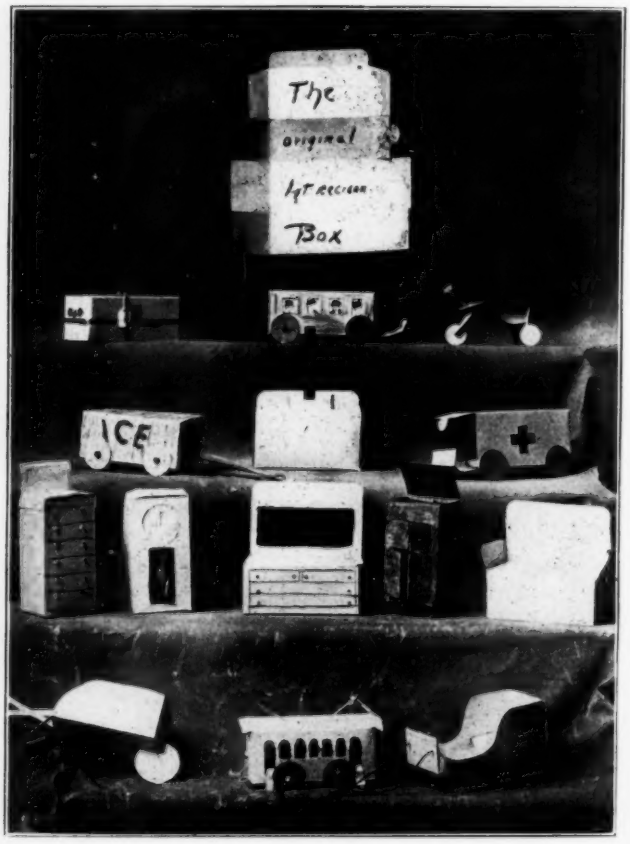


Fig. 1. The original ice cream box and the ice cream box toys made by the student nurse. A trunk, a bus, a coaster, an ice wagon, altar, ambulance, chest of drawers, clock, bureau, Victrola, bench, wheelbarrow, trolley car, and a baby's sled are among the interesting products submitted.

Children who live in a world of reading matter surrounded by adults who read aloud to them, tell stories, explain the new and the unknown as it appears from day to day in the child's life—these children seldom seem to have a definite time when they begin the art of reading. As I have watched such children, they go over into reading when it becomes a need in their constructive work, or the vital interest of the day or week. With almost all intelligent children, reading is a means to an end. One child I know mastered reading and writing in order to carry on his play with an express wagon he had received for a Christmas gift. The child made up dozens of packages with which to fill his delivery wagon, only to find that his game was incomplete. Express packages without an address were like a clock without a face. For several days he tagged his busy mother about begging for names of people to put onto his wobbly express packages. In desperation his mother said, "John Henry, go get the telephone book. It's full of names of people."

With the uncanny persistence that some children have, John Henry made of that telephone book a means of education. In fact, it turned out to be in his case a reader, a spelling book, an arithmetic, and a geography. His mother told me with a deep sigh that henceforth she should look upon the telephone book as a life-saver for mothers of five-year-old boys.

At the close of a lesson recently, each nurse in the junior class was given a new one-quart paper ice cream box. They were requested to bring this into class next day transformed into a toy. When

Fig. 2. A varied array of toys made from breakfast food containers.

the box is folded it is brick shaped (see picture No. 1, pasteboard box).

The student nurses looked a little blank. In answer to their question, "What can anybody make out of a plain box?" there came, not an

Fig 3. "Portrait of a stove" made from a paper egg container painted black.

answer of definite toys that could be made, but a request to look at the box and discover what objects moved about the city whose basic form was rectangular. A moment and the replies came flying:

"Milk wagons. Trolley cars Trucks. Laundry wagons. Ambulances." Then, "Passenger, freight and coal cars."

The frown left their brows and they left the room visualizing their tomorrow's offering.

I find that the method of giving a class a common material with which to work out an individual problem is a very good starter in construction work. They gain a valuable lesson from seeing how diversified human ideas are, even when expressed through so trivial a thing as toys made from a three-cent box. Please look again at picture No. 1. The original one-quart ice cream box at the top is uninteresting enough. We know that a hundred or more are cut out at a single stroke of a power machine. Then look at the row below. Ideas have begun to play upon that utilitarian ice cream box. A trunk strapped and tagged. A bus with people looking out the windows, and the third a toy that is uncertain whether to proclaim itself an Irish Mail or a coaster. On the next shelf—certainly human thought is varied—an ice wagon and a high altar stand together with a benevolent Red Cross ambulance. Below is a chest of drawers, grandfather's clock, a bureau, Victrola and a settee. These are followed by a weary wheelbarrow, a trolley car and baby's sled.

Evidently creative ability arose and flamed, for the nurses went out that night and bought extra boxes. When the class came together, the number of toys brought in was double and triple the class enrollment. A census was taken. Trolley cars led in numbers. Next came trucks for ice, coal, moving vans, circus wagons, laundry, and other delivery wagons. Milk bottle tops for wheels, with collar button hubs, served every purpose on these vehicles. Doll's furniture came third. Victrolas bloomed with persistence. Dolls' beds and cradles, baby carriages, cupboards, wardrobes, and trunks, and toys that could be dragged.

Referring to my earlier thought of being cast away on a desert island with a lot of children, I should hope and pray that all kinds of containers and boxes would be thrown on the beach with every tide.

In picture No. 2 you will easily see it would be impossible to keep school without a good supply of containers in which well known breakfast cereals arrive at our kitchen doors. The baby carriage at the top is constructed from a shredded wheat box. Its wheels of course are milk bottle tops. The other baby carriage at the right is made from a handsome box that somebody's Christmas stationery came in, with thick paper jelly glass covers for wheels. Below is a steam roller bearing down upon Old Mother Hubbard's cupboard. This cupboard is made from a candy box. The knobs are the ever useful collar buttons that we purchase in great gross packages for the use of children in a kindergarten and first grade. Among the other toys are a sled, made from a box cover, and a little wagon made out of a Lux box, two toys that can be dragged—ducks, I think they are. The chairs in which the stiff doll attempts to sit is made from a Quaker Oats box; also the wash tub and bench. The washboard beside it seems out of scale, but that never troubles little children.

Please look at picture No. 3. It is a portrait of a kitchen stove. Haven't you usually thrown away the paper box your eggs come in? A child can see in such a box a perfectly good stove with real holes for pots and kettles. Painting it black makes it more lifelike, and it can be played with for days.

Fig. 4. A miniature village street. All of the houses except the white one in the center are made from shoe boxes.

After the baby days, when the goal in construction work is a toy, and the spur for accomplishment the desire to play with the object, comes a wider angle of vision. The older child still wishes to construct and create, but his interests have broadened. Civic life, organization, trades, and occupations interest him. Village and town building becomes an absorbing topic. The question of who owns the land comes up: possession; what are deeds? why should they be registered? what is a court house? why is land taxed? who knows

how to measure land? The business of buying and selling land; parcels of land or lots; restrictions or rights of other citizens; upkeep of streets and sidewalks; lighting; cleaning of streets; sewerage; water; gas; electricity. Once the children are launched on these civic topics, a thousand subtopics creep in, such as building materials; what

Fig. 5. The little old red school house made from a large red pasteboard box.

are doors and windows for? why should the roof slope? why do houses need a cellar?

In picture No. 4 you see a portion of a village street. You can almost guess the kind of house the child lives in who contributed to this village street. The three-decker or three-flat house at the right is flanked by a stout baby carriage. This seems most appropriate, for baby carriages seem naturally to prefer many-flat houses to any other kind of house. Of these five houses, all but the white one in the center are made from shoe boxes. Of all the boxes that were ever made, a teacher loves the shoe box best. It lends itself to every mood of childhood. Corrugated board is a very valuable material in construction work. It makes beautiful roofs and takes on color well. In town building, let each child contribute the building he thinks the town needs and he can make best. A postoffice, town hall, cottage, school house, church, or store.

That Little Old Red School House

I sometimes wish that little old school house of our forefathers had been painted another color. It has been an educational red rag to me all my life. Some worshipper of things-as-they-used-to-be is always jumping up in a school board meeting and saying:

"Well! Seventy-five years ago most men got their education in a little old red school house, and they were men who became presidents of railroads, statesmen, captains of finance, and they never had any kindergarten, nor manual training, nor swimming pools, nor fool cafeterias. They carried a tin dinner pail to school, and got their manual training shingling the barn, or milking cows before daylight."

"Yes; but where one man came through and became a leading citizen, there are ninety-nine nobodies that have sunk into oblivion."

Picture No. 5 did not begin its life as a school house. It was a large, red pasteboard box in which gentlemen's shirts are packed. First a little boy made a church out of it. Later in the school year it was a garage. The box finished its year of school life in a second grade room as a little red school house, on account of its color, and supplied the need of a school for a civic center that had arisen on the school room floor.

Inside and Outside

Picture No. 6 is my old friend the shoe box presented as a problem to a group of grade teachers. They were asked to present a house or home reduced to its simplest elements. This one-roomed house seemed the best answer to the problem set. The essentials are there. The picture

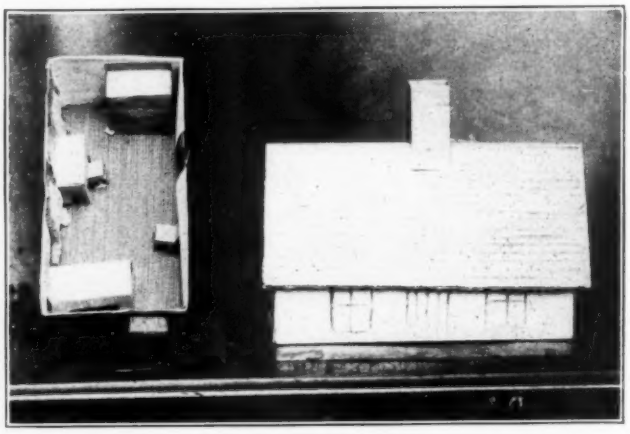


Fig. 6. A house, made from a shoe box, and the inside of one room. Here is a door, two windows with curtains, wall paper for a carpet, and bedroom furniture made of paper.

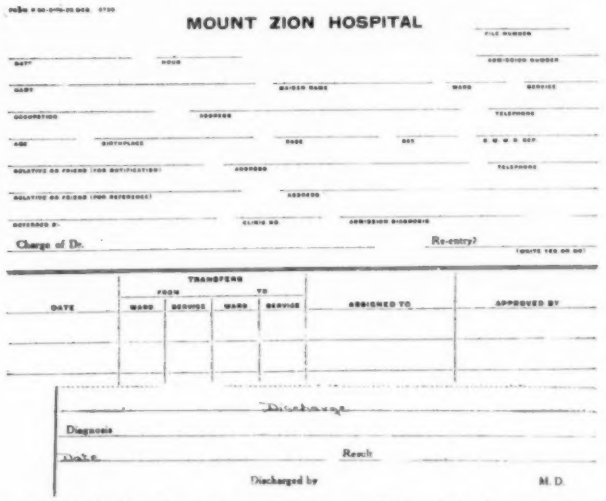
at the left is in answer to the problem of showing one room. Here is a door, two windows with curtains, wall paper for a carpet, and bedroom furniture made of paper. In this construction work nothing has been used that is of any value. They are, however, all materials that satisfy the child's desire to reproduce his environment—the desire to re-create, to change, and manipulate. They help to satisfy that innate desire to express his ideas in concrete form. Teachers and mothers should collect these odd waste materials and with them, pencils, paste, scissors, etc. Then let the children have unrestricted access to them, and don't be afraid of the necessary clutter that is the result of little children's busy play.

If you are acquainted with Happiness—introduce him to your neighbor.—Phillips Brooks.

THE STANDARDIZATION OF HOSPITAL RECORDS

By GENEVIEVE CLARK, San Francisco, Cal., Consultant in Case Records, San Francisco Hospital, Mount Zion Hospital, St. Mary's Hospital and Alameda County Hospital

NEVER before in the history of medicine have hospital case records played so prominent a part as at the present time—both from the standpoint of the patient, and because of their great value in research work. The necessity of keeping a complete, permanent record, properly indexed, of certain data in every case, is being realized universally. Since this data may be recorded in various ways, it is important to devise a system best suited to the hospital in general, with a view to standardizing the records as far as possible. Each hospital has its own peculiar problems, but certain routine work is essentially the same and the right system could be adapted to meet every need. A physician's time is too limited to permit of perusing sheet after sheet of a history. Therefore much attention must be given to the arrangement of the data so that the main factors of the case may be summarized. This article, with illustrated record forms, outlines briefly the important features of a system used successfully in several San Francisco hospitals.


MOUNT ZION HOSPITAL

Charge of Dr. Re-entry?

TRANSFERS

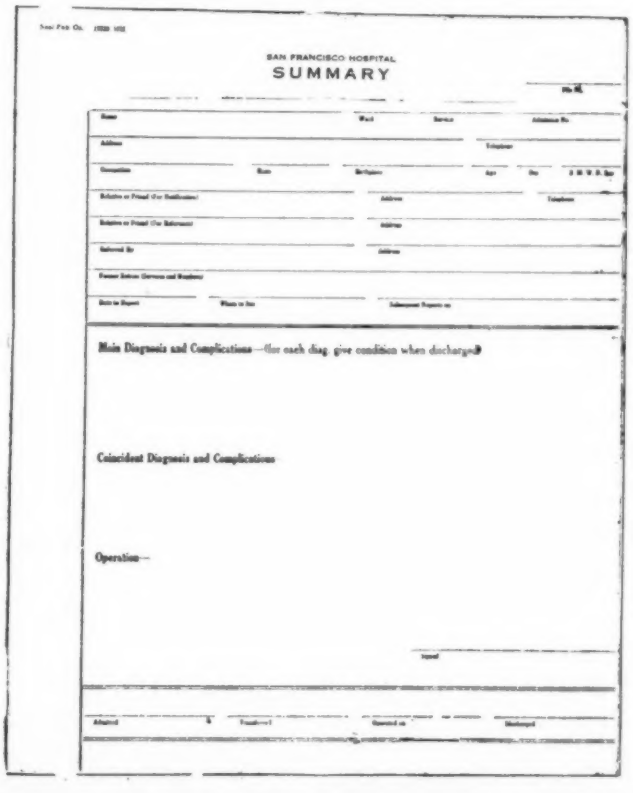
DATE | FROM WARD | FROM SERVICE | TO WARD | TO SERVICE | ASSIGNED TO | APPROVED BY

Diagnosis

Result

Discharged by M. D.

Fig. 1. Admission, Transfer, and Discharge Slip. Actual measurement of original, 8½x7 inches.


SAN FRANCISCO HOSPITAL

SUMMARY

Main Diagnosis and Complications—for each diag. give condition when discharged

Coincident Diagnosis and Complications

Operation—

Fig. 2. General Summary Sheet. Actual measurement of original, 8½x11 inches.


SAN FRANCISCO HOSPITAL

OBSTETRICAL SUMMARY

Diagnosis— Para Position

Pelvis

Pregnancy

Parturition

Puerperium

Complications

Injuries

Operations

Indications

Abnormalities on discharge—

Discharged on day after labor

Breasts Nipples Lochia

Cervix Perineum

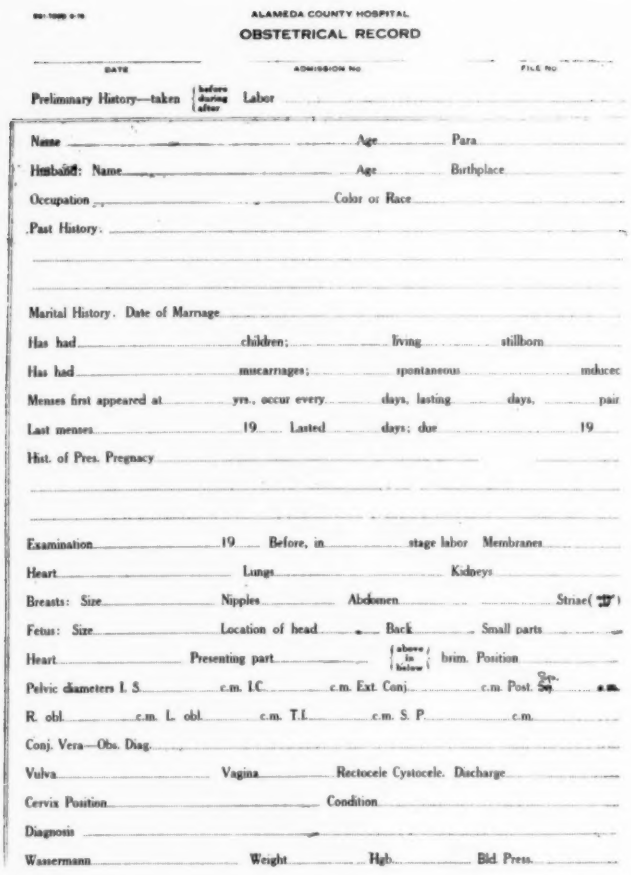
Uterus Size Condition

M. D.

Fig. 3. Obstetrical Summary Sheet. Actual measurement of original, 8½x11 inches.

Number System

Each patient has both an admission and a discharge number, assigned from registers in chronological order. The admission number merely represents the patients admitted to the hospital daily, and is used for statistical purposes only. The discharge number is the file number and also



ALAMEDA COUNTY HOSPITAL

OBSTETRICAL RECORD

DATE ADMISSION NO. FILE NO.

Preliminary History—taken { before / during / after } Labor

Name Age Para

Husband: Name Age Birthplace

Occupation Color or Race

Past History.

Marital History. Date of Marriage

Has had children; living stillborn

Has had miscarriages; spontaneous induced

Menses first appeared at yrs., occur every days, lasting days, pain

Last menses 19 Lasted days; due 19

Hist. of Pres. Pregnacy

Examination 19 Before, in stage labor Membranes

Heart Lungs Kidneys

Breasts: Size Nipples Abdomen Striae( )

Fetus: Size Location of head Back Small parts

Heart Presenting part { above / in / below } brim. Position

Pelvic diameters I. S. c.m. I.C. c.m. Ext. Conj. c.m. Post. Sup. c.m.

R. obl. c.m. L. obl. c.m. T.I. c.m. S. P. c.m.

Conj. Vera—Obs. Diag.

Vulva Vagina Rectocele Cystocele. Discharge

Cervix Position Condition

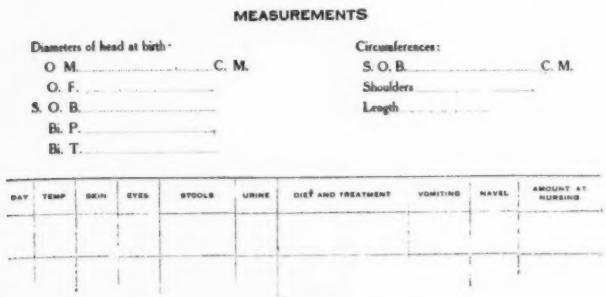
Diagnosis

Wassermann Weight Hgb. Bld. Press.

Fig. 4. Record of New Born. Actual measurement of original, 8½x11 inches.

represents the daily discharges. The discharge number is a great advantage in binding, making it possible for all records to be bound up to date. For instance, on the first day of every year the records of all cases discharged during the previous year can be found without delay.

When a patient is admitted to the hospital, a temporary slip (Fig. 1), containing all necessary data, is filled out in the office and sent to the ward with the patient. This slip is used for three



MEASUREMENTS

Diameters of head at birth:

O. M. C. M.

O. F.

S. O. B.

Bi. P.

Bi. T.

Circumferences:

S. O. B. C. M.

Shoulders

Length

DAY	TEMP	SKIN	EYES	STOOLS	URINE	DIET AND TREATMENT	VOMITING	NAVEL	AMOUNT AT NURSING

Fig. 5. Reverse side of Record of New Born sheet shown in Fig. 4.

purposes—namely, admission, transfer, and discharge, and is finally destroyed in the record room (which will be explained later). The admission book is filled out before the patient is sent to the ward so that the serial number may be added to the slip immediately. A blank summary sheet (Fig. 2) is also sent up with the patient to be printed by the nurse on admission to the ward. In obstetrical cases special summaries are used for mother and baby (Figs. 3 and 4). The office is notified immediately of births and the infant is admitted as a regular patient.

Transfers

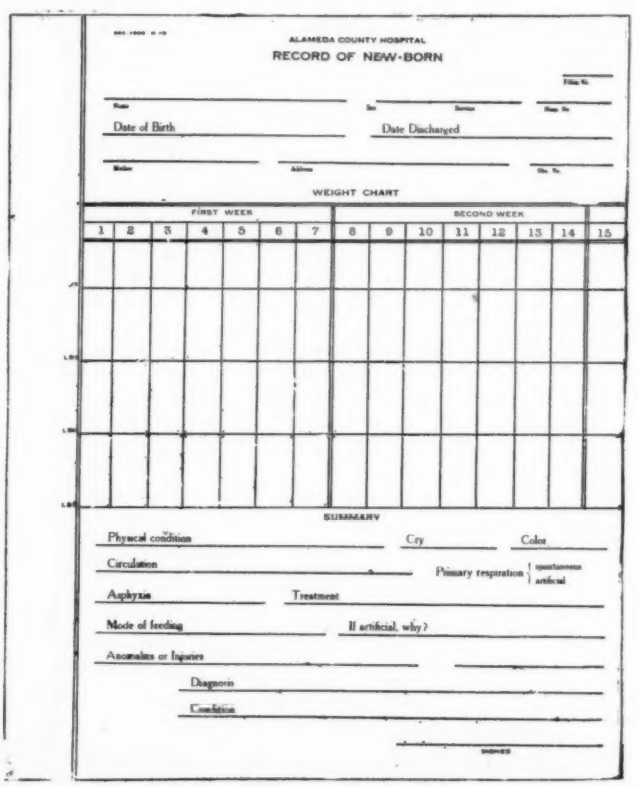
In case of transfer, the slip (Fig. 1) is brought to the main office by the nurse for the signature of the clerk on duty, after which, both slip and record are transferred with the patient.

Discharges

At discharge the slip (Fig. 1) must be signed by the doctor before the patient is allowed to leave the ward. At the close of the day the slips of all patients discharged during the day are brought to the office by the nurse in charge of each ward. In case of death the slip is brought to the office immediately. The discharge book is compiled from these slips and the number written upon them in the proper place; then they are held in the office until the following morning when they are turned into the record room.

Histories

Interns are required to write a complete standard history of every case, including family history, past history, present illness, physical examination, and bedside notes (which are kept regularly until time of discharge). With the excep-



ALAMEDA COUNTY HOSPITAL

RECORD OF NEW-BORN

Date of Birth Date Discharged

WEIGHT CHART

FIRST WEEK SECOND WEEK

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

SUMMARY

Physical condition Cry Color

Circulation Primary respiration { spontaneous / artificial }

Asphyxia Treatment

Mode of feeding If artificial, why?

Anomalies or Injuries

Diagnosis

Condition

Fig. 6. Obstetrical History. Actual measurement of original, 8½x11 inches.


LABOR RECORD

Labor began ..... A. P. M. ..... 19....

Presenting part ..... Above, in, below, brim

Position .....

FIRST STAGE

Contractions .....

Membranes .....

Medication .....

SECOND STAGE

Contractions .....

Child delivered, spontaneously, artificially ..... A. P. M. ..... 19....

Medication .....

THIRD STAGE

Medication .....

Blood loss ..... {ante / intra / post} Partum about ..... cc.

Source .....

Treatment .....

General Condition ..... Uterus .....

Placenta. Shape ..... Condition .....

Membranes .....

Cord ..... about neck ..... times. Treatment .....

Perineum {laceration / tear of} ..... Degree ..... suture

Repaired with ..... catgut and ..... a.w.g. sutures

Operations .....

Indications .....

Began ..... Ended .....

Present .....

Fig. 7. Reverse side of Obstetrical History sheet shown in Fig. 6.

tion of obstetrical histories (Fig. 6), blank history sheets are used (Fig. 8). Operation, treatment and laboratory sheets are also used (Figs. 9, 11, 12, respectively). All duplicate departmental reports pertaining to cases such as x-ray, pathological, and autopsy are sent to the record room and filed with the history. Records

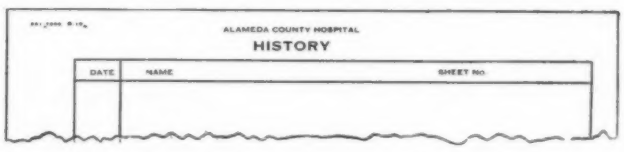


Fig. 8. History Sheet. Actual measurement of original, 8½x11 inches.

of all cases discharged the previous day are turned into the record room every morning. In this way the intern is given sufficient time to sign the summary sheets and to complete the discharge notes.

Record Room

It is the daily duty of the record clerk before she goes off duty to see that the records of all patients discharged from the hospital during the previous day are turned in on time, complete, correct, and properly indexed and filed. An exact routine for this work should be strictly followed.

Inspection

Each morning the discharge slips are received from the office and checked up with the histories

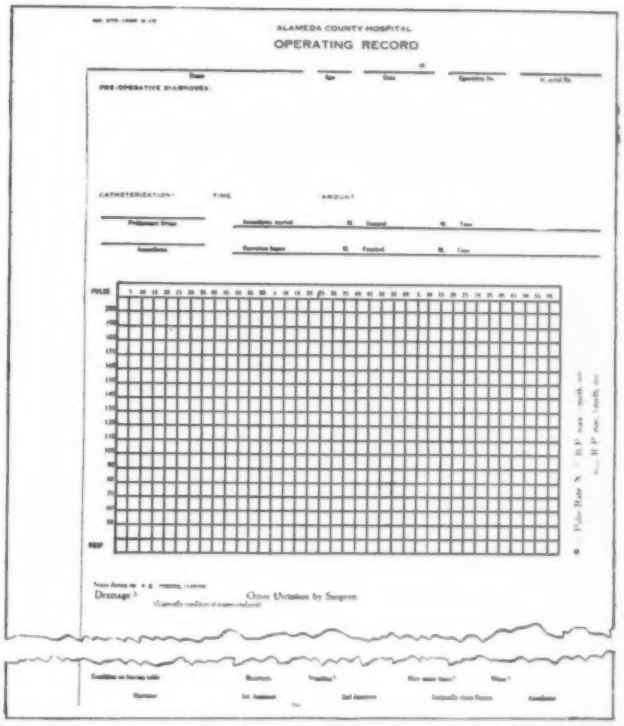


Fig. 9. Operation Record. Actual measurement of original, 8½x11 inches.

brought in from the wards. Missing histories are sent for immediately. The records are then arranged numerically by discharge number. Next the summaries are corrected by the slips

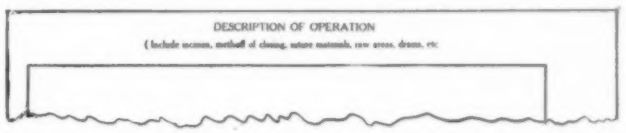


Fig. 10. Reverse side of Operation Record sheet shown in Fig. 9.

with special reference to dates. At this time the slips, having fulfilled their purpose, are destroyed. Then the histories are carefully inspected for mistakes or omissions. In case of anything that cannot be rectified in the record room, the intern is notified.

Indexing

Proper indexing is the next important step, without which, much valuable material is rendered useless. Each history is catalogued by Name, Diagnosis and Complication, Operation,

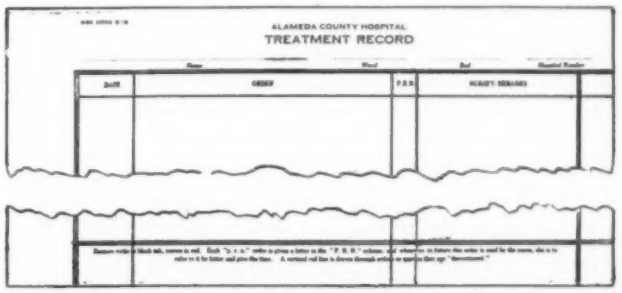


Fig. 11. Treatment Record. Actual measurement of original, 8½x11 inches.


MT. ZION HOSPITAL LABORATORY

Name _____ Date _____ Case No. _____

URINE—DATE								BLOOD—DATE							
24 hr. P. C.								Hemoglobin%							
Single								Erthrocytes							
Clear								Leucocytes							
Turbid								Polymorph.							
Viscid								Lymph.							
Sediment								Mono.							
Amber								Eosin							
Pale								Basoph.							
Dark								Myelocytes							
Blood								Lymphoblasts							
Acid "								Normo "							
Alkaline								Megalo "							
Neutral								Polychrom							
Sp. Grav.								Poikilocytes							
Albumin %								Platelets							
Glucose %								Malaria							
Levulose								Widal							
Acetone								Wasserman							
Diacetic								Culture							
Indican								Typhoid							
Bile								Strepto.							
Urobilin								Color Index							
Ammon								SPUTUM—DATE							
Chlorides								Thin							
Mucus								Tenacious							
Leucocytes								Purulent							
Erthrocytes								Bloody							
Hyaline Casts								Gray							
Granular "								Putrid							
Cellular "								Polymorph.							
Phosphates								Lympho							
Urates								Eosin							
Oxalates								Erthrocytes							
Squam. Epith								T. B.							
Renal								Pneumococci							
Diazo								Elastic Fibre							
Phthalein								Spirals							
								Crystals							

Remarks— Special Stain

Fig. 12. Laboratory Sheet. Actual measurement of original 8½x11 inches.

and Service—there is an index also of Causes of Death.

The name cards (Fig. 14) are filed alphabetically. Diagnosis, Operation, and Cause of Death cards (Figs. 15, 16, 17, respectively) are filed according to the "List and Classification of Diagnoses" compiled by Dr. James L. Whitney for use in the University of California Hospital. A service index listing cases of each department, proves useful and valuable for compiling annual statistics. (For cards used in this index see Fig. 18.)

Filing

Each history is put into a manila folder, numbered in pencil with the corresponding discharge


Name _____ Date _____ Case No. _____

STOOL—DATE								STOMACH—DATE							
Formed								Amount							
Hard								Normal Appearance							
Liquid								Bloody							
Normal								Chocolate							
Clay								Green							
Tarry								Sour							
Very Foul								Fecal							
Coarse Food								Puree-like							
Sl. Amt Mucus								Mucoid							
Lar. " "								Undigested Food							
Blood								Total Acidity							
Occult								Free Hcl							
Gall Stones								Combined Acid							
Fat								Lactic "							
Starch								Occult Blood							
Meat F.								Boas Oppler							
Leucocytes								Sarcinea							
Amoeba								Leucocytes							
Parasite								Erythrocytes							
Ova								Yeast							
Reaction								Epithelial							
Urobilin								CEREBRO-SPINAL FLUID							
Bile								Pressure							
Wohlgemuth								Normal Appearance							
MISCELLANEOUS								Turbid							
Urethral:—								Bloody							
Prostate:—								Fehling							
Vaginal:—								Nonne							
Nasal:—								Noguchi							
Oral:—								Cell Count							
Conjunctiva:—								Leucocytes							
Guinea Pig:—								Polymorph.							
								Culture							
								Wasserman							

Remarks:—

Fig. 13. Reverse side of Laboratory sheet shown in Fig. 12.

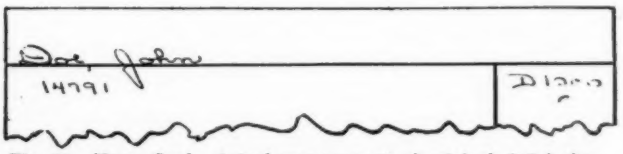


Fig. 14. Name Card. Actual measurement of original, 3x5 inches.

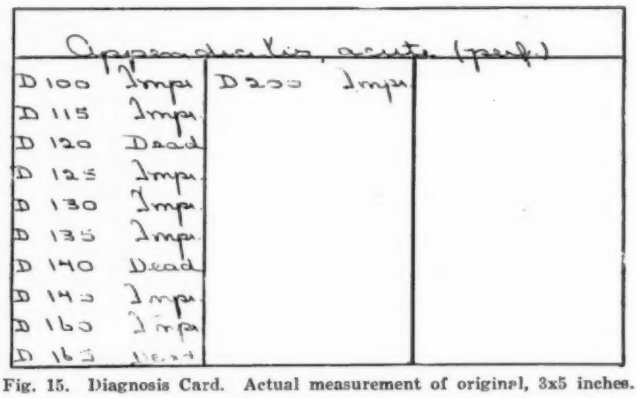


Fig. 15. Diagnosis Card. Actual measurement of original, 3x5 inches.

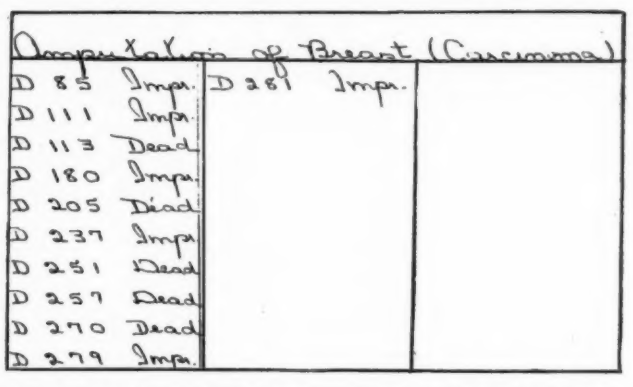


Fig. 16. Operation Card. Actual measurement of original, 3x5 inches.

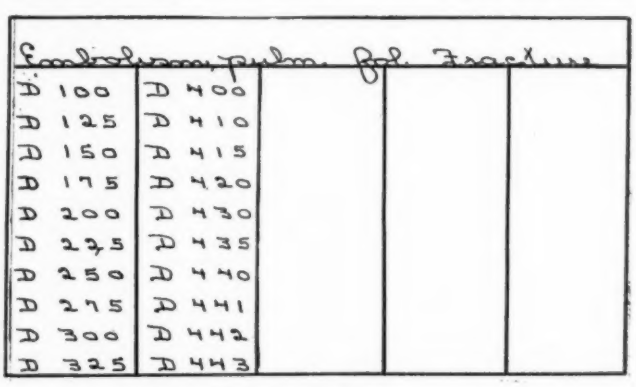


Fig. 17. Cause of Death Card. Actual measurement of original, 3x5 inches.

number, and filed temporarily (i. e., till it is bound), in a regular letter-filing case.

Binding

At the end of the year all discharged cases up to date are bound in volumes of 400 sheets, approximately. The volumes are numbered and then paged with a numbering machine. A typewritten index is made, consisting of the file numbers of that volume arranged in strict numerical succession with the page on which each can be found in an opposite column. Then a title page

is made and a pattern of the rub drawn for the binder. The most popular binding for hospital histories is in grey cloth with black lettering. This binding is considered rush work and arrangements can usually be made for the return of the records in from four days to one week. Binding is a great economy in space and prevents the loss or misplacement of a record.

Annual Reports

From the catalogues already mentioned, annual reports of diagnoses, operations, causes of death, and departmental cases can easily be compiled. A notation in red ink is made on each card, separating the cases annually, so that the indexes may run perpetually.

Borrowing of Records

In cases of re-entry, unbound records may be borrowed by the resident staff until the patient leaves the hospital, during which time they must be kept in the ward with the present history. Bound records may be borrowed for use at the visit, but cannot be kept out of the record room over night. Records borrowed for any other reason than for re-entry must be returned before

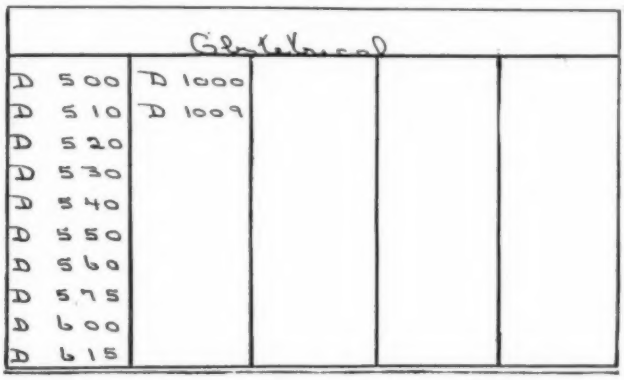


Fig. 18. Service Card. Actual measurement of original, 3x5 inches.

closing hour on the day borrowed. No record is ever allowed to be taken from the hospital except under order of a court of law.

No one who is not connected with the hospital should consult the records without special permission from the superintendent. If information from the histories is desired by insurance companies or outside physicians, an abstract should be made in the superintendent's office.

Properly to carry out the system outlined above, a record clerk should have a certain amount of training. For the past two years the writer has had full supervision of the record work in several hospitals, instructing the record clerks. The approximate time required for this is one year at a hospital, devoting two days a week to the work.

Florence Nightingale.

FLORENCE NIGHTINGALE

The life of Florence Nightingale offers an eternal source of inspiration for the world in general, and for the nursing profession in particular. The story of her devotion and service to humanity, though old in fact, is ever new in its message of purposeful endeavor and faith in accomplishment. Born of wealthy English parents, and given every advantage, socially and educationally, Florence Nightingale early interested herself in the care of the sick and the welfare of the poor. Impelled by a desire to administer to the sufferings of humanity, she overcame her family's opposition to her undertaking a career, went to Kaiserworth to study nursing, and later became superintendent of a charitable nursing home in London. In the Crimean War emergency she volunteered her services, and in charge of a staff of thirty-eight nurses sailed for Scutari. There she organized a nursing service founded on lofty ideals, instituted many reforms, and reduced the war mortality rate over 2,000 per cent. After her return to England, though permanently invalided, Florence Nightingale devoted her time to instituting hygienic reforms, organizing a highly efficient nursing service, founding the St. Thomas Training School for nurses, and assisting in the development of the Red Cross movement, as well as writing and publishing voluminously. She was one of the world's greatest forces working to promote the welfare of the sick.

FIELD AGENTS FOR NEW YORK HOSPITALS

Pursuant to a recommendation of the Hospital Development Commission, of New York, provision is made in the Appropriation Bill, recently introduced in the Legislature, for increasing the number of field agents in the State hospitals for the insane to the ratio of 1 to each 100 patients on parole, making 21 instead of 13 as at present.

One field agent for each of the State institutions for the feeble-minded is also provided.

The Development Commission's recommendation that the position of Director of Prevention and After Care be created to supervise the clinics and social workers was not acted upon favorably this year.

A PSYCHOLOGICAL ESSENTIAL IN GOOD HOSPITAL MANAGEMENT

By BARROW B. LYONS, Editor, Department Health and Modern Industry, The Modern Hospital, Chicago

SPIRITUAL leadership is the rarest type of leadership in the world. It lifts men out of the sordid grind of life. It creates in their minds a vision of impelling beauty which kindles the soul, that life-giving source of upward movement, and carries them onward to the accomplishment of miracles.

Spiritual leadership in hospital work is desperately needed. The souls of many hospital people have been dried by poverty, dried by self-seeking, and by the need to bow a hundred times a day to the merciless necessities which suppress at every turn their desires to serve. If unlimited resources, and the intelligence to use them, were only ours to command, how very, very differently we would administer and direct our hospitals,—how satisfying it would be to the latent springs of spiritual power now dammed back and repressed.

Spiritual leadership in hospital work is desperately needed. For the hospital to accomplish its mission of mercy a spirit of kindness must be all pervasive in the institution. Only when men and women work with their hearts full of kindness are they able to keep themselves keyed up to rendering the conscientious service essential in the care of the sick. Only when this spirit is manifest is the proper mental atmosphere for the recovery of the sick, created. Suggestion, as a therapeutic agent, can no longer be ignored. Trustees, superintendents, medical and nursing staff, and help should be selected for their inherent spirit of kindness, as well as their technical qualifications.

How different, too, would be the results of our efforts. I wonder whether better results would be obtained in a hospital in which the patients received the most skillful medical and surgical attention from men and women who despised their patients (as some physicians and nurses secretly do in the bottom of their hearts) or in a hospital in which kindness radiated from every soul, in which the most perfect harmony and cooperation in service existed, and yet the professional service was mediocre only. I thoroughly believe that the patients would receive greater benefit from the latter than from the former.

Psychologists have scientifically demonstrated how great is the power of the subconscious mind for good or evil over the body. Suggestion, as a therapeutic agent, can no longer be ignored. Yet it is a factor in medical science which not only has been ignored consistently, but has been belittled consciously because of the hostile attitude which the medical profession, until very recently, has maintained toward the discoveries in physical research made by non-medical men.

I know of no hospital which has yet attained a technique in the psychic therapy of patients which approximates the perfect conditions now demonstrated to be scientifically correct by our most expert psychologists; but even to suggest what such conditions should be is far beyond the scope of this article. However, a certain degree of psycho-therapy may be practiced by everyone who aids in the care of the sick person. Superintendent, nurses, orderlies, attendants, all may help create the proper mental atmosphere for the recovery of the patient.

It sounds almost commonplace to say that above all, patients should be surrounded by an atmosphere of kindness. Skillful surgery, aseptic technique, and proper medication are physical conditions which may in a measure be obtained without an inciting spirit of kindness toward the patient, but they never can be obtained in a degree approaching perfection unless this spirit is present. It is only when men and women work with their hearts full of kindness that they are able to keep themselves keyed up to rendering conscientious service. Fear may drive them for a time, but fear has never been known to produce a consistently good service.

Effect of Spirit on Patient

Equally important with the effect which spirit has in determining the physical quality of the work of a person, is the effect which it has upon the frame of mind of those for whom the service is being rendered. There is nothing which encourages a patient more and stimulates his will to live and recover more than the radiation of a kindly spirit from those by whom he is surrounded. A loving spirit should be manifest in every small act that is done for a patient; and, ideally, no one who is not filled with human kindness until he or she is brimming over with it should be permitted to remain a member of a hospital.

In as much as the ultimate power for good or

evil resides in the Board of Trustees, selection based upon spiritual and mental qualifications should be exercised particularly with trustees—but how many boards are selected or retained with these qualifications as one of the primary considerations? They are a far more important requisite in a trustee than the possession of money. A high degree of intelligence and good judgment should accompany the spiritual qualifications. A good heart is sometimes worse than useless without a good mind to guide its promptings; but money—the possession of money—is not a necessary requisite for a hospital trustee. Naturally, it is a valuable asset, but one which should be held subordinate to spiritual and mental qualifications. The consideration of money too frequently interferes with the proper spiritual guidance of a hospital's affairs. Command of money is necessary, but command of money may always be obtained by the demonstrated ability to render service. Any hospital which renders a service better than the average can command resources greater than the average by the intelligent use of publicity. People have received inferior service from hospitals for so long that when one demonstrates its ability to render an unusually good service people will never allow it to lack the necessary funds for very long. Confidence in this truth would enable many boards of trustees to improve their institutions far more rapidly than they do.

What hospitals suffer from more than anything else is suppression—spiritual suppression. In order that the human spirit may develop it must express itself. The recent demonstrations of Freud, Jung, and others show that in the last analysis emotions cannot be successfully suppressed, that they find expression in some way, and if not directed along healthy, normal, constructive channels, prove terribly destructive.

In more than one instance have I seen the love of a nurse for her work and her patients develop into hollow, hypocritical sentimentality, because of the stifling suppression of institutional existence. She was not permitted to act naturally with her superior officers but was forced to exhibit an attitude of formal respect which tended to develop hearty dislike; she was so pressed by her ward duties that she was unable to become humanly acquainted with her patients, or responsive to any but their physical needs; she was permitted no healthy social intercourse with persons of the opposite sex, yet the irresistible impulse of sex led her to seek male companionship in dance halls, or to repress her instincts until dangerous or anti-social mental conflicts developed.

The superintendent is not the least sufferer from suppressed impulses. It has been truly said that man is either a reed shaken by the wind or a wind to shake the reeds. Comparatively few superintendents develop the power to lead their boards, and consequently must accept the spirit of their boards, whether it be their own or not. Their judgment in details and often in the smaller matters of policy may be accepted, but rarely do they possess the spiritual force to direct as they would care to, the more important policies. Therefore they must attune themselves to the spirits of their governing bodies, or suffer. In the case of the average man or woman it is much easier to accept the spirit of the board as one's own spirit, than to submit in act and word and rebel in spirit only; and as one of the most consistent habits of the human mind is to eliminate such conflicts the spirit of the superintendent generally succumbs. When the spirit of the board is a good spirit no harm is done; but frequently this is not the case. A great hospital executive once said to me: "The remarkable thing is that more superintendents do not disagree with their boards." This man had the gift of leadership to such a degree that he selected the men for his own board, just the men he wanted, men noted for their liberal, progressive spirit and sound human judgment. He built his own hospital, just as he wanted it; and organized it just as he wanted it; and ran it just as he wanted; and he has achieved the distinction of controlling a hospital rendering a service bettered by none in this country.

Consider, however, the average superintendent who feels that he must bow to the wishes instead of moulding the wishes of his board—that man must often submit to things against which his spirit rebels. He must, perhaps, consent to the selection of inefficient medical men, simply because they are relatives or friends of board members. To such men he must show deference even though he sees them neglect, or maim, or kill patients; and his boiling wrath and indignation he must bottle up and cover with a smile.

Often he may be placed in a position where he is required to press a patient for money when he knows that the patient can ill afford it, or that the worry of securing the money is preventing recovery. Sometimes he must commit acts of injustice such as discharging an employee to make room for a friend of a board member, or must employ an inefficient person for the same reason, or buy goods at a higher price than the hospital would pay unless a board member were interested.

As for creating a better medical organization by insisting upon staff meetings, better case records, interest in teaching interns—how often can

a superintendent insist upon these things when the men whom he must convince are too lazy or selfish or incompetent to wish to be convinced, and have far more influence with his board than he? In most hospitals the superintendent every day sees patients made to suffer through neglect yet he suppresses his emotions of resentment or his desire to construct better conditions until he ceases to function emotionally.

The same sort of suppression is felt all down the scale; one person forces it upon the next until the whole institution seethes with repressed emotions calling for expression. As a result hospital people sometimes, when they are mentally honest, become cold, hard, and bitter; and when they are not mentally honest they frequently fool themselves and others by wearing a mask of kindness that is but skin deep. I once knew a superintendent of nurses who professed the greatest kindness and interest in her patients and nurses; yet her kindness was so mechanical, so lacking in dynamic force, that repeated suggestions and urging did not develop in her sufficient energy to rid her patients' beds of vermin. Her love had degenerated entirely into superficial sentimentality.

Self-Seeking Motives in Trustees

If trustees who were entirely free from self-seeking motives could be selected for hospitals I believe that a healthier institutional atmosphere would develop. The desires which lead people to accept the responsibilities of hospital trusteeship may be classified as follows:

1. The desire to relieve present suffering.
2. The desire to relieve future suffering.
3. The desire to exercise authority.
4. The desire to achieve social recognition.
5. The desire to do something to "be good" or to purchase a place in heaven.

All of these motives may exist consciously or unconsciously in varying degree in the minds of the same person at the same time. In most trustees the desire to relieve suffering is probably the foremost, except when personal interests are touched upon. Then comes the desire to achieve social recognition; but unfortunately those who thoroughly enjoy the exercise of authority frequently force themselves into the foreground and dominate the councils of hospital boards. Frequently these people are exceedingly aggressive, and not at all infrequently they are the more ignorant and less cultured members of boards.

I was once connected with a hospital in which the policy of the board was dominated by a man of whom one of his commercial competitors said: "Three-fourths of the strikes in this community start in H——'s factory." To illustrate the type of mind and spirit which may dominate an institution presumably destined to render a service of mercy, let me relate an incident.

Once I called upon this man to discover why bills for treatment rendered his injured employes under the Workingmen's Compensation Act of his state were not paid.

"Why we never report our injuries," he rasped. "I'm afraid that if we did they might raise the insurance rates on us. We seldom have very serious injuries here, except when some one catches his hand in a machine or something like that. When anyone gets hurt we just let him go home and take care of it himself. Sometimes he goes to his own doctor and sometimes to the hospital, but anyhow we don't have to bother with him."

"But don't you know that the compensation rates are not regulated by the number of accidents you may have, but by your payroll and the occupations of your employees?" I asked.

"Yes, I suppose that's so," he said, "but anyhow we don't have any bother with them if we don't report."

"But don't your employees complain because they don't get compensation, or because they have to pay the doctor's bills? And don't you realize that you are losing, as well as your employees when their wounds are not properly treated? Many infections could be saved if you sent the cases directly to us, and you would lose nothing, and gain good will if you reported the cases; and furthermore, the law definitely states that all injuries must be reported at once, and your agreement with your insurance company calls for the same thing."

"Well, that may be so," he admitted; and after that he paid more attention to his injured workers.

Yet that is the type of mind, stupidly selfish in the extreme, which dominated the policies of that institution. When the question came up of developing a broader and better service, the fairer minded members of the board permitted this man to kill the plan which would have meant a great development in the usefulness of the institution.

Why did they kill the plan which they admitted would have been of great benefit to the working people in their community? Because their social and business relations with this man meant far more to them than the welfare of the neighborhood; because forcing the plan over the aggressive opposition of this man would have meant a social break which they were not willing to make, and because they feared the vituperation which this man would almost certainly have vented among many business men of the neighborhood who might bring financial support to the insti-

tution. They lacked the courage to create a great service, trusting that its intrinsic value would bring to it sufficient support.

Inherent Kindness a Qualification

Everyone who has known the inside management of hospitals has known of similar instances; yet not until a board frees itself of this type of leadership can it create the best conditions for the recovery of those whom it would serve. Not only trustees, however, but superintendents, medical staff, nursing staff, orderlies and even help should be selected because of their inherent kindness, as well as their technical qualifications. I want even my scrubwomen and cleaners to be kindly as well as efficient people, in order that there may be no discordant note in the entire organization.

Perhaps there is today somewhere a hospital in which the spirit of kindness and brotherhood is all pervasive. This is not an idealistic dream. Careful, scientific selection of members of the organization from the members of the board down to the scrubwomen is not impossible. If such an institution does exist in it will be found a spirit of devotion to the work, which insures a wonderful cooperation of all elements in the creation of a great service. The spirit of hope, and cheer, and kindness so emanates from the entire hospital force that it is like coming home from a long journey for a patient to enter its doors.

Such an institution does not find itself handicapped for lack of funds, nor does it have difficulty with its help, nor does it find it difficult to secure competent and interested interns, nor does it suffer from a lack of student nurses, nor does it lack the services of the most competent surgeons and physicians in its community. All that it lacks is space in which to care for the constantly increasing number of those afflicted by injury or disease who come to its doors for relief and comfort.

PRESENT TUBERCULOSIS PROBLEMS

In an unusually well written paper entitled "Tuberculosis Problems of Today, Doctrines, Conditions and Needs," and appearing in the American Review of Tuberculosis March, 1920, Stewart of Ninette, Manitoba, discusses tuberculosis problems under the subdivision, "Doctrines, Conditions and Needs." Tuberculosis is more a social than a medical problem; less a disorder of the individual than a disorder of the community. Its occurrence in the individual depends upon the conditions which enter into his life. Its development out of social conditions connects it up with every movement for the betterment of living conditions; nothing in a community is without relevance or interest in the consideration of this disease. The stresses of army life have broken down many soldiers, but this has been balanced to some extent by the number of those who have been actually improved by the drill, regular life, and outdoor work of the army. Asphyxiating gases have not aroused tuberculosis. The good results of the war have been a better understanding of the disease, more accurate diagnosis, a more general resort to treatment in early cases, more and better equipped institutions for treatment, a juster idea of the tuberculous man's place in the community, and a fuller utilization of even the definitely tuberculous man for service. The most crying need is information that shall convey the truth about tuberculosis.

Home of Florence Nightingale, near Ramsey, England.

The MODERN HOSPITAL

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Contributors, subscribers, and readers will find important information on advertising page 42.

FINANCING THE GROUP INDUSTRIAL HOSPITAL

In outlining the plan for "The Group Industrial Surgical Hospital" presented in the Department of Health and Modern Industry, page 493, Dr. A. M. Carr entirely disregards the matter of expense. He is perfectly right in assuming that expense *should* be a secondary consideration when the conservation of human life and limb is at stake; but in order to make such a plan practicable, one first has to find men to supply the money. To pay a chief surgeon $15,000, employ competent assistants at correspondingly fair salaries, pay a good superintendent what he is worth, employ graduate nurses for all ward work, feed everyone in the hospital properly, would be an exceedingly costly operation.

While there is an intense need for the type of hospital described by Dr. Carr, there is also a great need for practical idealists in industry who can see the need for it. Dr. Carr bases his argument for the hospital on a purely utilitarian basis, believing that the cost over income would be covered by increased physical and mental efficiency on the part of employees treated in the hospital, as well as by the creation of better feeling toward the industries operating the hospital. This is a difficult matter to prove. It might also be argued that if the plan were based upon purely utilitarian purposes it would be quite certain to fail. If the backers were genuinely anxious to be of service to their employees as well as to render profits to their stockholders, and the hospital were simply a part of a much more extensive effort to serve those within the industries involved, the plan would have a better chance for success.

Evidently the plan has grown from an intense desire to serve on the part of Dr. Carr. Unless the men who were ultimately responsible for the hospital were infected by the same rare spirit, the institution would probably deteriorate into little better than the usual hospital which Dr. Carr pointedly condemns.

One point that Dr. Carr has not mentioned is the proposed method of paying for the service. If the chief surgeon received the substantial salary suggested, would he or the hospital collect the fees for surgical service? Presumably the hospital. This would be a source of income which few hospitals at present enjoy. If properly graded, surgical fees might go far toward defraying expenses.

Furthermore, as soon as the hospital established a high reputation for the unusual service which it could render, it would probably attract many wealthy persons desiring the benefits of its organization. Such persons might be admitted and charged surgical fees in excess of those for industrial workers. Such fees, in order to be fair to the medical profession, should not be less than those charged in private practice for similar service. They might very possibly defray by far the greatest part of the expenses of the institution and certainly cover the cost of an exceedingly high grade of surgical service.

To develop the institution to this point, however, would take unusual foresight and a board of trustees which was willing to spend a large amount of money without being disappointed if it did not produce the results they hoped for. It is sincerely to be hoped, both for the sake of industrial surgery and for the sake of the industrial worker, that Dr. Carr will succeed in locating such a group of men.

GENERAL HOSPITAL TREATS INFECTIOUS DISEASE

An excellent illustration of the successful application of the principles of medical asepsis in the hospital care of communicable diseases, as laid down by Chapin and described and illustrated by Richardson in his admirable series of articles in the April (1919) to February (1920) issues of the MODERN HOSPITAL, may be found

in the work of the infirmary of the University of California, as described by Dr. Robert T. Legge in his article on Students' Health Service of California in the May issue of *Modern Medicine*.

As the private hospitals of Berkeley, California, will not take communicable diseases, the presence of any such case in any of the boarding and fraternity houses dooms that house and all its residents, infected and uninfected alike, to quarantine by law. What this meant in non-attendance of whole groups of students can readily be imagined. With the advent of the infirmary and the practice of medical asepsis, obviating the necessity of a separate contagious building, all this has been changed, much to the relief of both the students and the university officials. Now when a student suffers from a contagious disease, or has been exposed to it, he or she appears at the infirmary for examination and advice, and if necessary, admission. If the clinical and pathological examinations show the presence of a contagious disease all of the members of the house at which the patient resides are examined, in order to discover all missed and carrier cases. If any are found they are also sent to the general infirmary. Concurrent and terminal disinfection are used, but fumigation has been abolished. The infirmary records show that no cross infections have ever occurred.

A NEGLECTED SOURCE OF INCOME

The suggestion embodied in Dr. Goldwater's article on page 436, entitled "What Should Private Patients Pay," is an exceedingly valuable one.

It would seem to be almost self-evident that well-to-do private patients should meet the interest on the capital cost of rooms and the other facilities they use, funds for the construction and purchase of which were contributed through donations voluntarily made by philanthropic individuals for the care of the sick, and that this interest should be used in the further care and treatment of indigent patients. This is good ethics. Were the money, so donated, invested in high class securities, the hospital authorities would never for a moment consider using the funds for any other work than the maintenance of the charitable work of hospital.

But not only is such a charge upon well-to-do private patients good ethics; it is also good finance. It takes cognizance of the important factor of the cost of the service to private patients, and of two other important factors—the cost of the medical service, and the patient's share of the current expenses of the institution. Were the hospitals of this country as a whole to act on this suggestion, it would undoubtedly add several million dollars annually to their income. A conservative estimate places the number of private hospital beds in this country at 40,000. On the basis of present costs, these beds represent a capital outlay of about $200,000,000. The interest on this amount at 6 per cent would be $12,000,000. But even if we take the actual cost of the construction of these facilities under pre-war conditions, the interest would amount to about $6,000,000, an item not to be disregarded in these days when hospitals are having difficulty in securing funds for proper maintenance.

HOSPITAL PROGRESS

The month of May saw the birth of a new magazine, *Hospital Progress*, the official organ of the Catholic Hospital Association of the United States and Canada. THE MODERN HOSPITAL welcomes it warmly as it is gratifying to see another magazine of high purpose enter the hospital field.

Hospital Progress is a magazine with a mission that commends itself to all who have the progress and prosperity of our hospitals at heart. The character of this mission is clearly stipulated in the salutatory, editorials, and articles of its first issue. "It wishes to become," runs the salutatory, "the medium through which the best thought and hospital service to the sick will work into the lives of those who are consecrated to this service—consecration to service must be wrought into the lives of all who care for the sick. *Hospital Progress* wants to help all to realize more and more deeply from month to month that care of the sick must become in very deed a consecration of mind and heart and soul." In one of its leading editorials we find this statement: "Today there is ample evidence to prove that adequate service to the patient is far from omnipresent. To learn the causes of this inconsistent state, to help supply what is wanting and to right what is wrong, is the purpose of the Catholic Hospital Association; and as a constant aid to the attainment of this end, *Hospital Progress* finds a positive reason to exist.

Through its various channels of knowledge and experience this journal, the official organ of the Association, shall endeavor to keep before its readers the true philosophy of work in the medical sciences, together with such information as shall practically help the hospital not only in its various scientific functions, but also in the plans and building of its physical structure." Still again, in a special editorial to the Mothers General, Mothers Superior and all the Sisters working in the Catholic hospitals of the United States and Canada, Father Moulinier, the chairman of the

magazine's Executive Committee, says: "We must avoid as well in our hospitals as in our magazine, all fads and fancies. We must find the facts, real, basic, and controlling facts as they are at work in our hospitals. We must face these facts with calmness, with deliberation, with a firm determination to bring progress out of them no matter how adverse and insurmountable they may seem. They must be thought about and talked about and written about for the benefit of all the hospitals on this northern continent. Whether these facts be financial or scientific or ethical or religious, or whether they be buried down deep in human nature, whether they be locked up intimately with personal or professional pride, conceit and vanity, it makes little difference, they must be brought to light. They must be made to stand before the tribunal of an institutional and, if possible, a national sense of what is right and just, and must be made eventually to yield to a sane and saving sense of an ever unifying conviction as to what is right and proper for the bringing about of a true and safe progress in institutional scientific service of the sick."

The purpose of the leaders of the Catholic Church to dig out and make a practical application of the controlling facts as they are at work in their hospitals is evinced not only by this declaration of faith and purpose on the part of *Hospital Progress*, but by the thoroughgoing, searching surveys of hospitals and allied institutions and their activities which have recently been made in several of the larger communities in this country, notably Pittsburgh and New York City, under the leadership of the archbishops of the dioceses in which these communities are located. Here again, facts were sought out in order that they might form the basis of a scheme for hospital coordination and cooperation, with a definite view to bringing all the Catholic hospitals of these communities up to the minimum standards set by the American College of Surgeons, and to provide such additional facilities and departments as the needs of the hospitals and the community may dictate.

Animated by a desire to base their progress upon underlying facts and inspired by the leadership of such a journal as *Hospital Progress*, the Catholic hospitals of the United States and Canada may be expected to build an enduring structure of service in the cause of good health.

A GLIMPSE INTO VOLUME FIFTEEN

What considerations should determine the selection of the individual members of hospital boards of trustees? How should such boards be organized? What are their duties and responsibilities? How can a board of trustees best select a superintendent? What is the board's relationship to the hospital's employment problem? What have the trustees a right and a duty to ask for in the way of reports from the superintendent? Should the trustees or the superintendent take the initiative in the raising of funds? Have the trustees the right to ask the superintendent to curtail essential expenses in order to meet a crisis in the hospital's finances? What are some of the most effective ways of raising funds? What should be the relationship between the board of trustees and the superintendent, the medical staff and the nursing staff? How should auxiliary committees be organized and what should be their relations to boards of trustees?

These and kindred questions will be dealt with comprehensively and authoritatively by a group of our leading hospital superintendents and trustees in early issues of THE MODERN HOSPITAL.

* * * *

Hospital ventilation is receiving just at present a great deal of attention. This has doubtless been stimulated by the group of articles we have recently published, by Dr. Ellsworth Huntington, on "Air Control and the Reduction of the Death-rate after Operations," and "The Purposes and Methods of Air Control in Hospitals." We have, therefore, decided to continue the discussion of this important subject, and in the near future will publish articles by Mr. Konrad Meier, a heating and ventilating engineer of Winterthur, Switzerland, who is familiar with Professor Huntington's research work but who does not agree with him on all points, and by Prof. John R. Allen, dean of the College of Engineering and Architecture of the University of Minnesota.

* * * *

The commendable work performed among our doughboys by the lads and lassies of the Salvation Army has centered public attention upon the work of this organization. One of its greatest activities—an activity often lost sight of—is its hospital work, and this will be fittingly described in an illustrated article which has been prepared for us at their headquarters.

* * * *

Active workers in the tuberculosis campaign, whether superintendents, nurses, social workers or architects, will find it profitable to read several articles which will appear shortly and which bear directly on their field. One of these is by Mr. Walter D. Thurber, the managing director of the Illinois Tuberculosis Association, on "Spotting Life-saving Stations on the Map of Illinois." Another is by Dr. H. T. Vermillion on the Southern Baptist Tuberculosis Sanitarium, one of the important

tuberculosis sanitariums of the South, and still a third by Harold Field Kellogg on the Norfolk County (Mass.) Tuberculosis Hospital.

* * * *

Mr. Warren C. Hill of the firm of Kendall Taylor Company, architects, Boston, is well known by those of our readers who are hospital architects. The plans of the Stevens Clinic of the Union Hospital of Fall River, Mass., were prepared by his firm, and are fully described by him in an illustrated article which will be published shortly. Another architectural article which will interest architects faced with the problem of planning additions to existing hospitals is one by Mr. John William Donahue, architect, on the addition to St. Vincent's Hospital, Worcester, Mass.

* * * *

The therapeutic side of hospital work will be represented by a stimulating article on hydrotherapy by Dr. J. H. Kellogg, of the Battle Creek Sanitarium; the management side, by an article on the "Perpetuation of the Original Investment in Hospital Building by Creating a Sinking Fund," by Mr. Henry J. Gilbert, vice-president of the Saginaw Welfare League, Saginaw, Mich.; and the mechanical side, by an article on the "Care and Up-keep of Boilers and Engines," by S. E. Balcome, who was for many years the engineer of the Worcester City Hospital, Mass.

* * * *

Space prohibits our commenting in detail upon other articles scheduled for publication in the next volume. Among them, however, we may mention these: "The Place of Hospital Social Service in the Modern Hospital," by Deborah H. Barnes, head of the Social Service Department of the Milwaukee Children's Hospital; "Occupational Therapy in State Hospitals," by Dr. William Rush Dunton, Jr., assistant physician, Sheppard & Enoch Pratt Hospital, Towson, Md.; "The Carney Hospital Obstetrical Department," by Dr. Fred W. Johnson, gynecologist, Carney Hospital, Boston; "The Hospital Hostess—a New Departure," by Ruth H. Bachus, Rochester Homeopathic Hospital, Rochester, N. Y.; "The Equipment of the Small Pathological Laboratory," by Dr. W. A. Hinton, pathologist, Wassermann Laboratory, Massachusetts State Department of Health, Boston, Mass.; "The Reconstruction of the Tuberculous Eudowood Sanitarium," by Dr. M. F. Sloan.

VENEREAL DISEASE CONTROL THROUGH HEALTH CENTER

An analysis of the plans for the proposed Health Center at Norfolk, Virginia, as printed elsewhere in this issue, is of interest from the standpoint of venereal disease control—partly because the scheme as outlined is so comprehensive that one is struck immediately by the possibilities of detecting and remedying disabling manifestations of gonorrhea and syphilis in all the groups provided for.

The officials of Juvenile and Domestic Relations Courts meet with a considerable percentage of cases where the delinquency is attributed to, if not caused by, gonorrhea and syphilis. It is readily understood that venereal disease plays no unimportant part in disturbing home ties.

With facilities at hand for the prompt examination, diagnosis and treatment of men, women, and children brought before a keen human and humane Judge, presiding over the more or less informal and private judicial proceedings of these courts, unlimited opportunities are offered for reclamation, rehabilitation, and readjustment.

From the need for medical diagnosis and aid grew the demand for a polyclinic which is planned to meet the general health center requirements, and which gives the venereal service the needed space to meet the clinic requirements.

The Pre-Natal Building is more than its name implies, and opens up an unlimited field for an educational as well as therapeutic attack upon gonorrhea and syphilis. In this building can be housed not only the pre-natal work, the post-natal advice service, the pre-school age examinations, the mothers' health clubs, but also the classes for midwives and the like—all groups in need of examination for freedom from communicable disease, as well as instruction and treatment. No one will deny the advantage of treating an expectant mother for syphilis, or the child's hereditary manifestations. No one will thwart the effort to inculcate cleanliness in the midwife, nor deny that a knowledge of the salient points about gonorrhea and syphilis will aid her in her tasks.

The detention home has no relation to prostitution. As a place for holding children during the period required by the court to properly investigate cases, however, this Health Center offers through such investigations a unique opportunity to spread social hygiene information, and to bring under the jurisdiction of the Health Department those individuals found to be infected.

A very conservative estimate would be that Norfolk as a city has need for treatment facilities—pay, part pay, and freed—for some 4,000 individuals in a year. It would seem that the space provided should be ample, by arranging a "staggered" schedule of hours by sex and color, to provide for the part pay and free treatments required in a city of 100,000, especially as the venereal disease service can be operated as a separate entity, at night or any unusual hour, by the use of the special entrance.

KATHERINE McCLUGHAN'S SECRET

By VIOLA L. PETERSON

"How much further up the sthrate be the place locatid?" asked Katherine McClughan in a tone of one desiring information.

"It is only a short distance; but perhaps you had better let me call a cab, Mrs. McClughan." The blue eyes of the speaker looked anxious.

"Come along and don't be a-talkin' cab t' me," came back the answer with a forced roughness in the laugh. "Katherine McClughan has allers been seen a walkin' these same sthrates afoot, whereiver she took a notion t' go, an' if iver ye find yerself a dhramin' that she's adoin' it ony ither way, just raalize that its a dhram that'll niver come thrue."

"Yes, I know," replied Margaret, "but you have been working hard lately, when you should have been resting; for you know you will need all your strength."

"And won't I hev all there be uv it to hev? Nobody has any uv it, that I know uv, to be shure. But what do I want with it afther all?"

Margaret looked up in surprise at her companion's tone, and caught an expression of longing on the usually cold face. "Want with it? Why, that does not sound like you, Mrs. McClughan; for you know you need it all for the operation."

Again the soul of Katherine McClughan was perfectly masked. It had been unmasked but for one brief moment, but it should not occur again. No. No one should guess her secret. "Yes, I suppose it be so, choild. Though the docthors do be sayin' that tain't nuthin' serus, an' ye know I niver was no weaklin'. It's a big nate lookin' buildin', ain't it now? I wondhor if its ez clane on the insoid ez it is on the outsoid."

"As neat as wax," was all that Margaret could reply before a white-robed attendant appeared to admit them.

"Could ye be a-tellin' me if the superintendent be in?" In reply the white-robed figure ushered them into a waiting room, saying that the superintendent would see them in a minute.

Mrs. McClughan sat down stiffly and surveyed everything in the room with a cold scrutiny. After a while she got up and walked over to another chair, where she could look out of the window. "This is a moighty lang minute, I'm a thinkin'," she said at last. "Seem's t' me they'd hev to be more accomidatin' to their customers, if they want to kape up the business."

"I am afraid the business here would have to be kept up, whether the customers thought they were very well accommodated or not," Margaret replied, glad to break the silence.

Mrs. McClughan pressed her lips firmly together and swung her foot back and forth. Margaret said no more. Soon Superintendent White came in. She was large and dignified and important.

After the necessary form of entering the patient had been gone through, they were ushered upstairs, through long, clean halls, past many doors. Cases of clean, polished instruments showed through one door. They were led up the stairs, and over to a big room in the corner. Here a nurse met them.

"I am so glad you are to have this beautiful room, Mrs. McClughan. It is so big and light and airy, and right on the corner, too, so you can see out on both streets," Margaret said, taking a view for herself from the windows.

"Yis, its well enough to be sure. Much better'n the warrd. I don't know how the poor cratchurs there stand it, at all; with all the moanin's agoin' on around 'em. The Lard hilp the poor souls. An' did ye notice the little lad wid the crutches, Margaret? He must shure have been bad hurt. He must shure that, an' how he shmoiled up so swate loike into the face uv the nurse, whin he found he could take jist one little stip at all. But we must all do our own sufferin' and the Lord knows we have plinty on it." And Mrs. McClughan drew herself together again with a formidable look.

The nurse seemed to know all about Mrs. McClughan, when and why she came, and just what would be done.

"How do you like your room, Mrs. McClughan?" she asked.

"It is pritty good fur the place," she said.

"We think it is one of the most pleasant in the hospital, and I hope you will enjoy it," the nurse replied cheerily. Then she told Mrs. McClughan that it would be best for her to go to bed at once. Margaret told Katherine that she would see her the next day, smiled brightly, and went away.

The nurse put her patient to bed, and said, "If you want anything, just ring the bell." Then she too went away.

"If I want anything, indaad! Ock Marvin! I moight ring the bell furiver an' a day, an' it would niver bring me what I'm a pinin' afther. Patsy, oh Patsy, why did I send yez away?"

It mattered little to Katherine McClughan that hers were the large room looking out on both streets. Her vision did not depend on windows nor lights nor streets. Her eyes were looking into the past. Her face showed that what she saw there was greatly disturbing to her soul.

She knew not how the time elapsed; but presently the nurse brought in Father Ryan.

"I am sorry to see you here, Mrs. McClughan," he said. "Will your operation be a serious one?"

"They do be a tellin' me I am likely to pull through all roight," she answered indifferently.

"I hope so certainly," replied the Father, "but it is best to have all settled, and not to neglect any necessary means, you know."

She flushed him one withering glance. Her lips were firmly drawn.

"This is a trying time," he went on. "I suppose Patrick will be here."

"Mr. McClughan be a workin' and will not come unliss he be sint for."

"Ah, and just let me know, if you need my services at any time," the Father said, and bade her adieu.

"So it is bisth to hiv ivery thing sittled, it is; but the tillin' uv it t' yez would hiv little t' do with the raal sittlin' uv it, accordin' to my mind. He thought he'd find out me secret, Patsy. But he didn't do it, did he, Buy? Katherine McClughan still kaaps her own council. Did ye think I'd be a tellin' him how I sint yez away with harrd wurrds an' complainin' spaaches, sivin waaks ago the mornin', Patsy? An' ye niver gin me a harrd wurrd nor a blow in yer loife. But I can't furgit yer last look, Patsy, so kind o' sad an' reproachful. Oh, yis, I know ye'll furgive me. Ye could niver do no ither way wid yer kind harrt. But will the Holy Angils be able to furgive me bein' so dridful silfish? I hev more fear uv thim, Patsy."

The morning for the operation came. Mrs. McClughan's face was calm and set. When she reached the operating room she was still herself. "It's a foine roid ye hev given me, gintlemen," she said.

"It's not every day that you have a ride like that, is it. Mrs. McClughan?" replied the doctor.

"Not ivery day t' be shure." Not, indeed, since the day that Patsy carried her across the brook, she thought.

She took the anesthetic as if she were breathing the nectar of flowers, and it was only when she became unconscious of her own doings that she betrayed herself. Then she called, "O Patsy! Patsy!" And when the operation was over and she was coming out from under the influence of the anesthetic, "O Patsy! Patsy!" she called again, "will I niver see yer smilin' face agin? I kin niver endure it widout yez, Patsy! An' it's all me own fault intirely—all me own fault."

Mrs. McClughan's remarkably strong constitution bore its trial even better than the doctors had hoped. Yet when all cause for great suffering was past and the patient was kept perfectly quiet, there was still an unaccountable height of temperature, and Margaret was told that the doctors feared a septic condition. She knew that this meant danger, and said to herself, "There's a mistake somewhere—there certainly is a mistake somewhere."

* * * *

Mrs. McClughan's supper tray stood on the stand by her bedside untouched. Her face wore a look of homesickness. She did not hear the door open; did not know that anyone had entered, until the nurse said that she had brought someone to see her.

Mrs. McClughan turned her eyes toward the door. There stood Patrick, awkwardly holding his hat in his hands. In his eyes was a questioning, timid look, mingled with joy. His face was worn and haggard.

"It is just about supper toime, Patsy. Ye had bitter git riddy, mon. Ye kin put yez coat an' hat on that cheer."

Patrick obeyed, then drew a chair to the bedside. "I be roight glad to hev another supper wid yez, to be shure," he said.

"It is well ye didn't wait much longer, mon, or ye'd hev hed to hev ate it alone, " she answered.

But Patrick was always slow of thought. "Now thet would not hev been so plisint ez some moight think. I be roight glad uv the honor uv addin' a little to the faast, madam," he said, producing some fine oranges with the air of one who is winning his way.

"Mr. McClughan ye be ez extravigint ez iver." But she surveyed the big oranges gratefully.

"An' who in the wurrld has a bitter roight. Kin yez tell me, girl?" he rejoined with a broad smile.

"Thet I kin not, Patsy; but shure, mon, ye don't think I know the affairs uv ivery one in this wurrld?"

The next day the nurse told Margaret that the fear of the septic condition had passed. The patient's temperature had lowered greatly, and her respiration was nearly normal. Margaret's heart beat more freely as she ran up the stairs.

Katherine's voice greeted her. "Well, Margaret, choild, ye look rall brisk this marnin'. But ye air intirely out uv brith. Why will ye be a killin' yersilf a runnin' up thim sthairs?"

"Now, Mrs. McClughan, how can you ask, when you know I came to see you?" And the soft, white fingers closed over the thin brown ones. "And are you really feeling a little better, Katherine?"

"I think I shall soon be a peelin' the parathies, an' a seein' afther the house."

"And right glad you'll be of it, I'm sure," answered Margaret.

"Sthrange thet I shouldn't be under the carcumstances, Mrs. McClughan replied lightly; but she never explained those circumstances. And Margaret wondered, seeing that the cloud was lifted from the soul of Katherine.

At the street door Margaret met Mr. McClughan, whom she knew had been working out of town for several months—a position which he could not very well leave, supposedly.

"So you are back, Mr. McClughan," she said. "I am so glad you are here."

"And I am roight glad to be here, I ashure ye," and Patsy's rough hand nearly crushed Margaret's in its big embrace.

Thus Margaret guessed the secret. But with her it was always held sacred as the secret of Katherine McClughan.

AN EXPERIMENT IN LAUNDRY SUPERVISION AND CONTROL IN A GENERAL HOSPITAL

By CHARLES F. DIEHL, Superintendent of the Hospital for Deformities and Joint Diseases, New York City.

The laundry problem in hospital administration is a difficult as well as an important one to solve. Plenty of clean white linens, muslins, and towels are absolutely necessary to the hospital. To produce this result with a modern steam laundry is not a difficult task, and to accomplish the mere cleansing and ironing is not a costly one; but to operate a laundry circulating system, free from any considerable destruction of material and with only a reasonable amount of loss in inventoried articles, is quite a different undertaking. The experience of a general hospital in introducing a more exacting system, in place of a loose method of laundry supervision, and a comparison of the results of the two systems may serve to show how efficiency as well as economy in operation may be accomplished in laundry work.

In this hospital the stock of linens, muslins, and towels had been so greatly reduced, that ofttimes there was not sufficient clean bed sheets, pillow-cases, and towels to go around. In order to increase the efficiency of the institution, it was necessary to add very materially to these stocks. At this time the question had been raised whether or not an extravagant amount of bed sheets, pillow-cases, and towels, was being purchased. In order to determine the answer to this question a complete system of checking every piece of material both ways was put in force in the laundry.

Inventories at the end of every month for four months of all material in use in the hospital showed a 12 per cent loss in the laundry at the end of the first month, an 11 per cent loss at the end of the second month, and a 9 per cent loss at the end of the third month. This would mean a total loss in twelve months. The greater proportion of the losses was in bath towels, face towels, and doctors' hand towels, but there was a considerable loss in bed sheets and pillow-cases.

What this depletion of stocks meant to the smooth running of the institution, every hospital man knows; and how tense was the strain upon the laundry is almost impossible to conceive. It had to be operated at capacity every day and there never was any let-up. To relieve such a condition as this was worthy of thought and active supervision.

The system, so called, which was in use for years in the hospital, consisted of filling in a laundry slip on which was entered the number and name of the various soiled articles returned to the laundry. In following a basket of soiled linens to the laundry the superintendent discovered that there was really no counting of the material, and that even the laundry slips were not retained; that all the different wards and floors had distinctive marks on the linens, muslins, and towels belonging to their service, and

that the linen room returned to those various wards and floors such distinctively marked pieces as came through the process of laundering. That was all there was to the system.

Features of Laundry System

In going over the entire problem the following system was worked out:

That the hospital would begin with a complete stock for every ward and floor;

That the laundry slip, then in use, would be retained;

That a duplicate of the slip or a carbon copy would be kept by the charge nurse;

That laundry bags to contain every soiled thing intended for the laundry from each ward or floor, would be put into use;

That one man should collect all soiled linen from every ward and floor and that he also should return all clean linen from the laundry to its respective station;

That an employee should count the contents of every bag brought to the laundry and check the slip which accompanied it, and then send that slip to the linen room as a requisition for clean linen;

That all torn or otherwise damaged pieces should be sent out of the linen room and kept for a board of condemnation consisting of the superintendent or his assistant and the house-keeper, who would decide whether this material should go to the sewing room for repairs or be used for porter's wiping cloth; if it were condemned, a new piece was to be taken from the shelves and added to the inventory to replace the condemned one;

That the stock decided upon for each ward or floor would be maintained numerically the same until experience showed the supply to be inadequate.

This system was installed at a cost of $180 for canvas bags and additional baskets in the sorting room, and an added expense of $70 and maintenance per month for the extra labor involved. The wards and floors of private rooms and operating rooms were stocked up with what was deemed to be an adequate supply. Instead of the inventory totalling 3721 as was shown by the first count, we now had 5763 articles.

Results of System

The entire system was then put in motion, and at the end of the first month it had led to the following satisfactory results: Only thirty-six pieces were not returned. Of these, fifteen articles were sent to the sewing room for repairs, nineteen were condemned and therefore replaced, and only two were unaccounted for. This good work kept up month after month and never was there a relapse into the old condition. An inventory taken at the end of the first year shows a result equally as good as the one taken at the conclusion of the first month. The strain on the laundry was removed. There was always a generous supply of clean linens for the hospital, and the saving in dollars and cents was enormous.

Among the many benefits following the successful operation of the system was the solution of a help problem in the laundry. Prior to that time, owing to the extra heavy duties placed upon this department, there was always a dissatisfied crew, rarely a complete one, and almost every day there was a new face in the laundry. But after the introduction of the system, with the easing up of the strain, the workers were contented and remained in the hospital's employ. There were only six new employees in one year.

The good work did not stop there. Its effect could be seen in other parts of the establishment. Perhaps the introduction of system and supervision accounts for the fact, or perhaps the removal of friction and tension in one department influenced the morale of another. However, lasting, satisfactory results were obtained without introducing a complex system. This point is essential to the success of the experiment. If, in place of no system, an intricate one had been introduced it probably would not have been so well received, and would not have met with so much cooperation.

NEW METHOD OF SUN TREATMENT PROVES THERAPEUTIC AID

From France has come a new method of employing the rays of the sun for purposes of treatment. This is now being applied at The Children's Hospital of Boston. In this latest method, large double convex lenses are utilized, through which the rays of the sun are intensified. These rays are concentrated directly upon wounds, discharging sinuses, tuberculous and infected joints, and other local

Fig. 1. This illustration shows the large, long focus lenses in use in the Children's Hospital in Boston. The lens, enclosed in a cylinder made of wooden slats and wire over which a thin white covering is tightly stretched, is so placed on its adjustable tripod that the sun's rays fall perpendicularly onto the affected part of the patient. In this position it produces the best results.

affections, the results of the employment of this method as a curative agent in these affections, have proven very successful.

What is now the accepted method of sun treatment was established a few years ago by Dr. Rollier at Leysin, Switzerland. In his method, however, the whole body of the patient is, as a rule, exposed to the sun, whereas in the new method only the affected parts are exposed. The curative power of the sun attracted wide attention during the war by its successful use in war infections. Prominent military hospitals and prominent military surgeons have expressed not only their approval of its therapeutic use, but also their opinion that the sun as a disinfecting agent and stimulant toward normal processes of healing will be a powerful auxiliary to medicine and surgery, and a promising object of study and research.

Features of New Sun Treatment

The lens in use at The Children's Hospital is twelve inches in diameter, and the sun's rays directed through it reach a focus at a distance of seventy-two inches from the lens. The focal point is dangerous, and will burn wood in a few seconds; therefore, the wound or affected part is placed half way, or a little more than half way, between the lens and the focus. At this distance the circle of light thrown upon the patient is from three to five inches in di-

ameter. The rays, though very bright, can be watched by the nurse through colored glasses, and can be borne with comfort by the patient. The heat is not intense at this distance from the focus.

The patient's head is protected in some way from the sun. If he is in such a position that he can see the rays from the lens, he is provided with dark glasses, as the bright rays are very fatiguing, and possibly injurious to the eyes.

Treatments are of five minutes duration at first, increasing in length each day until an insolation of half an hour, three quarters of an hour, or an hour is reached. Treatments can be given twice a day.

Method of Employing Lens

The lens is enclosed in a cylinder made of wooden slats and wire, over which a thin white covering is tightly stretched. The cylinder is so placed on its adjustable tripod that it directs the sun's rays to the centre of the lens, through which they must fall perpendicularly onto

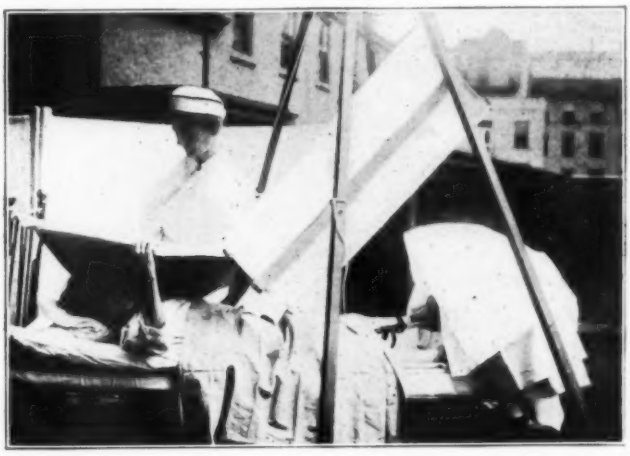


Fig. 2. This method of sun treatment is being succesfully employed in cases of lupus, tuberculous and infected joints, wounds, and discharging sinuses.

the skin of the patient in order to produce the best effect. It is hung by cords to a support in such a way that it can be turned to the exact angle required, and there fastened securely. This cylinder aids the nurse in measuring the correct distance from the lens to the patient.

When the sunlight is very hot, it is necessary to make the circle of light larger by moving the lens nearer to the patient. When it is poor, the circle can be made quite small by moving the lens farther away, the amount of heat increasing as the surface under treatment approaches the focus of the lens.

The sun in winter, spring, and autumn in this region is valuable, but the length of treatment will vary, of course, according to the heat of the sun, being naturally longest in winter. In winter, spring, and autumn, the lens treatment is given between 10:30 a. m. and 4:00 p. m., while in summer it is best in the early morning and late afternoon.

The method of using the rays of the sun through large lenses of long focus comes from Brittany, where it has been employed in curing various forms of tuberculosis, and old, infected war wounds. Cases of lupus of long duration have been entirely healed within a short time. Old sinuses, dating from years back, have closed quickly; suppurating glands, even tuberculous laryngitis soon responded, as did other affections which had hitherto resisted all treatment.

The Children's Hospital is the first institution in America to hear of and install the method of using the sun rays through a lens of this character. In return for the aid American generosity gives the stricken children of the old countries Brittany has taught us the use of this device which we have reason to believe will relieve the suffering of our own little ones.

HOSPITAL MORALE*

DONALD GUTHRIE, M.D., Surgeon-in-chief, Robert Packer Hospital, Sayre, Pa.

To maintain good hospital morale, it is important to have the closest cooperation between the management of the hospital, the medical staff and the nursing force. The patient should be considered from the psychological standpoint from the time he is admitted until after he leaves the institution. During his entire stay his mental welfare and comfort should receive the same careful consideration as his physical welfare—for the majority of our patients are mentally as well as physically ill. The personnel of the hospital should be chosen with care and the personality of each worker must suit the position he is to fill. Few of us realize how timid and diffident most of our patients are on admission, or how easily they may be hurt by apparent inattention or frightened by their new surroundings. It is so very important to have their reception a cordial and friendly one, for the first impressions they get are often lasting ones. If they can be made to feel a kindly interest in their welfare on their arrival, if they can be waited on promptly by attendants and nurses who have been specially trained, if they can be spared seeing, smelling and hearing things which are objectionable to them, in other words, admitted to a ward filled with only convalescent patients, who are happy and free from pain, the chances are the patient's mind will be robbed of most of its fright and he will be made to feel at home at once. If, on the other hand, he is allowed to sit for a long time without notice or attention, watching those hurry by who have special missions to perform and who are too busy to greet him, he will feel hopelessly alone; or if he is given a bed next to a postoperative case in which the patient is groaning with pain or one in the throes of having gastric lavage, or should he be unfortunate enough to have a couch next to a patient in the typhoid state, it is not difficult to imagine the state of his mind or to blame him for wanting to go back home again. Fright, fear, and timidity are the wrong impressions to inject into his mind at the beginning, if he is to be made a good patient and have a comfortable and quick convalescence, for we all know how the state of mind may retard and upset the convalescence.

The hospital that is equipped with many recovery rooms, small wards and isolation corridors for the postoperative, the very sick, or those in delirious states is indeed fortunate, for the big ward should be made up of the new arrivals and the comfortable convalescents. Our operative cases should not be moved out into the big ward until the patient is free from pain if it can possibly be avoided, no lavages or painful dressings should be done in the ward, nor should a death be allowed to occur in the ward. The surgeon of today dare not hurt his patients to help them later, and, if possible, he should rely on light gas and oxygen anesthesia to remove gauze drains and deep sutures.

Nothing gives me more satisfaction or delight than to walk through a long ward between two rows of happy,

*Address delivered before the Section on Surgery of the Medical Society of the State of Pennsylvania, Harrisburgh Session, Sept. 23, 1919.

smiling, contented patients and receive their friendly greetings. Perhaps I do not pay enough attention to hospital etiquette and ceremony in my work. I have seen rounds made where the chief received the same silent respect that only an army officer could hope to get, where patients were silenced by rigid commands and nurses were punished for the slightest breach. I have been in other hospitals where all the convalescents arose and stood in attention at the foot of the beds while the chief was about, but there was a tense atmosphere about these wards and I could imagine I heard the sighs of relief when we departed. Singing, music, or laughter never upset me when I go into my wards. I do not believe we are obliged to have our patients fear us in order to get and hold their respect.

While on the subject of the ward, just a word about the "kicker." We all have them and we all know how fatal they are to good morale. If one is found by a pupil nurse, he should be reported at once to the nurse in charge and his complaint investigated. If the complaint is just it should be remedied at once; if there is no foundation for it and he is just kicking because it is his nature and he cannot help it, we make a well-organized drive at him—pupils, nurses in charge, the directress, the intern, the members of the staff, everyone who comes in contact with this patient tries to disarm him and have him succumb to kind attention. If he cannot be transformed into a good patient he is moved out of the ward.

The drink of water and the bed pan should receive our most careful attention! How often we hear, "I lay all night begging for a drink of water," or "I called for a bed pan for just one hour and when I did get it, the nurse went away and forgot me and I lay on it for hours!" I sometimes wish I could have a drinking fountain at every bed and enough nurses on night duty to wait on only five patients, each nurse armed with five bed pans. A few minutes' wait in the dark seems a long time, if the call should be urgent, and our nurses should be trained to wait on these patients promptly and give them every attention.

Too much care and system cannot be taken in listing and caring for the patients' clothing and valuables. How often a man, who has convalesced from a midnight operation for strangulated hernia or perforated ulcer, really a life-saving measure, forgets all about what has been done for him in his rage over the loss of his hat, or a family who, after weeks of anxiety during a long drawn out convalescence of their child, who has had a ruptured appendix with peritonitis, complain bitterly and perhaps threaten suit because of the loss of a feather pillow the boy had on the stretcher on which he was transported. After I have listened to their tirades and been upset and hurt by their ingratitude, I have had the satisfaction in having some of these patients write me after they have arrived home that in their hurry to get the train the hat was left at home or the pillow at the station; but it all emphasizes how very important it is to give attention to every detail of the patient's admission to the hospital.

Good hospital morale demands loyalty on the part of the nursing force and the medical staff to the chief on duty. Dissatisfaction on the part of the interns is extremely contagious and spreads quickly from the training school to the patients. I believe if we were to give our interns more consideration and attention, if we were to go over our cases more carefully with them, and ask them more often for their opinions and suggestion, we could make cheerful co-workers of them instead of dissatisfied critics. They should be taught to receive their patients with every consideration and respect, and to care for them tenderly, regardless of their walk in life. Their good work should be rewarded by increasing our confidence in them. The directress should not criticize the chief before the interns or the interns criticize him before the pupil nurses, for pupils soon impart the true state of affairs to the patient.

The nurse should be taught to apply the Golden Rule to her work at all times. She should imagine herself or some member of her family in the condition of the patient she is caring for; she should be warned that, if a patient has an unreasonable, impatient nature in health, these characteristics will be greatly exaggerated during a period of suffering, and she should learn to discount them. She should be shown that a smile wins out and that it will be her best asset if it is properly backed up by a genuine interest in her patients and her work. In caring for those who are suffering she should give her efforts willingly, promptly, and tenderly, and should never let a patient feel she is giving aid because she is obliged by the rules to give it.

I do not know of a bigger factor to promote good hospital morale than a corps of efficient, loyal, well-trained nurses, who love their work and who look on it as an art and not as a trade. Their tender care of the patient during his suffering leaves a lasting impression in his mind, and their well-chosen suggestion during the convalescent period is of great and lasting benefit.

You are all familiar with Cannon's work, "The Effect of Emotions Upon Bodily Secretions." We have all seen a convalescence retarded and upset by fear, worry, doubt and anxiety, and have all seen a change for the better in the patient's condition as the mental attitude is changed by suggestion.

Good food, well cooked, served hot in an attractive way is a great asset to the hospital. No convalescent should be allowed to be hungry if there is no reason why the diet should be restricted. It is better to apply economy to everything else in the hospital rather than to the table. The food should be the best that can be bought and there should always be enough for everybody. It should be served in dainty, tempting portions, and not in great bulk. A flower on the tray, a delicacy out of season will often do much to please the patient's mind and increase the flow of digestive juices.

The surgical or medical chief should examine all patients when they are ready to leave the hospital. At this time the patient's disease or operation should be explained to him in detail, all final instructions for his after-care should be carefully given him, besides telling him that his home physician will be written to about his case. This gives him a sense of security at home and the request that he write back a report of himself from time to time is met with delight, for he feels that the interest shown in him will not come to an end when he leaves.

One word about the anesthetists and the operating room team. If our anesthetics are given skillfully there will be little fright, little excitement, little nausea or vomiting. The patient will recover in a quiet way, not screaming, struggling, and vomiting, for the subconscious mind goes to sleep last but is the first to wake. A successful anesthetist must be a skilled psychologist. The team should be organized on psychological lines and it must handle the patient before the operation in the operating room and during his postoperative course in a skillful way.

The public should be treated with every consideration by the hospital. Information about patients should be given cheerfully, promptly, and correctly at all times. The telephone girls should be taught to smile over the

wire and the attendant at the door should be a skilled diplomat. It is so important to have the friends and family of the patient feel that the hospital is anxious to serve them in a kindly way as well as the patient. For this reason all commanding signs such as "Silence," "No Noise," "Walk Gently," "Talk Softly," "Touch Nothing," do more harm than good, for they give the public the wrong impression. There is no warmth in such commands.

During times of great anxiety all visiting rules are best suspended. The families of the very ill should be allowed to stay with the patient, to spend the night if necessary, to be served hot food during the night, and to have everything done for their comfort. This is extra work, to be sure, but the hospital loses nothing by such acts of kindness.

The business office should be very careful in its treatment of a sorrowing family. I believe it is best not to settle up affairs immediately after a death, unless it is the earnest request of the family that it should be done, but to wait for a time before sending statements. This is not good business, I know, but it is not a bad policy.

Those of you who belong to the visiting staff of hospitals need not give many of these points consideration, for any blame or criticism on the part of your patients can be passed on to the hospital management; but those of you who run hospitals know the importance of giving every small detail of the patient's stay in the hospital your best attention, for his criticisms react on you personally.

If our hospitals could be robbed of their cold institutional atmosphere by little touches of human kindness, if the patients were treated more as individuals and less as cases, if management and the nursing force would cooperate better with the staff in planning for the patient's welfare, I am satisfied there would be much less criticism.

Maeterlinck says, "If the bee colony is to survive through the long winter the spirit in the hive must be good." The spirit among the workers in our hospitals must be the best if we are going to get and maintain good hospital morale.

MUSIC INTRODUCED AS THERAPEUTIC AID IN NEW YORK HOSPITALS

The therapeutic value of music for certain forms and degrees of illness has not been sufficiently appreciated in our public hospitals. The New York City Visiting Committee, which especially interests itself in the welfare of the patients in the municipal hospitals, has long felt that the mental condition of the patients was a most important factor in their recovery. What is going on in the minds of all those men and women lying in their cots or sitting day after day day by their neat white beds? What will help them get a fresh grip on life as their strength returns, or what will cheer them a little as they feel it ebbing? Several years ago the committee helped to organize occupational therapy, and through its secretary was also able to arrange for much music in the wards of the hospitals and almshouses. Miss Mary Weare, a young southern musician, especially interested herself in the therapeutic side of the work. It was delightful to go into a long grey ward and hear all the patients singing the old songs that meant so much to them.

Then the war came on and the Music League for War Service interested many musicians in the military hospitals. Indeed so many artists offered their services that later when the armistice was signed it seemed that the time had come to arrange some regular and permanent means of providing music for our public hospitals.

Shortly before Christmas, 1919, Miss Taber interested some of her friends in helping her to get Christmas music for as many hospitals as might be reached. Mrs. Francis Rogers, who was associated with the Amateur Concert Club of New York, which for many years has furnished entertainments for hospitals, settlements and homes, cooperated with Miss Taber in this idea, and they found it was only necessary to ask musicians to lend their talent to have them consent with the utmost willingness and generosity.

Mr. Arthur Sewall Hyde, organist of St. Bartholomew's Church, who has recently died, took about forty of his choir to Bellevue Hospital, and they marched slowly through the wards singing Christmas carols. Many of the patients had not heard music for a long time and were deeply touched by this beautiful Christmas message.

Mr. Miles Farrow, of the Cathedral of St. John the Divine, took about fourteen of his boys over to Blackwell's Island, and they also went through the wards of the Metropolitan Hospital singing their Christmas carols, and later went to the City Home on the same island, where they gave a concert in the large halls for the men and women who are unfortunate enough to have no homes of their own and to be forced to live in this Institution at the city's expense. As the notes of "Holy Night" sung by those sweet clear voices died away one of the patients whispered: "I thought the angels had come."

Music was also given in the City Hospital on the same island, by Miss Mildred Dilling, harpist, and Miss Lhevinne, violinist, who went from ward to ward and brought much comfort and joy. A most interesting result of the music was the development of personality among the patients. A former well known cellist who had been a chronic patient for many years spoke to the musicians of his beloved art. An expert violin-maker was found in the neurological wards. It is for the nervous cases that music is most helpful.

Mr. Bruno Huhn, the organist at Dr. Hilles's Church in Brooklyn, was ready to go with his quartette to one of the big municipal hospitals in Brooklyn, but it was temporarily quarantined on account of the influenza.

Music was also furnished at Sea View Hospital on Staten Island.

Primarily as a result of the success of these concerts and particularly as the outcome of a long cherished plan, it has been decided to put music in the City Hospitals on a permanent basis. The work is to be taken over by Miss Mabel R. Beardsley of the Community Service, 15 East 40th St., and with the cooperation of Miss Marion R. Taber, Mrs. Francis Rogers, and Miss Marie Kieckhoefer of the Music League of America, Miss Beardsley is to arrange to give concerts at stated intervals in all the hospitals that may be reached.

A large list of musicians, mostly professionals, have responded enthusiastically to the appeals that were sent to them to cooperate in this work, and have placed themselves "on call"—in fact, they say that they are only too glad to have the chance of using their art to bring the kind of pleasure that it alone can bring to those who are sick in mind and body.

The head physicians of the hospitals are beginning to realize the great necessity for this kind of mental refreshment to break into the monotony of hospital life, and welcome this chance to help their patients. The enthusiasm which was shown for all the war sick and wounded should not be allowed to wane, for the civilian need is quite as great.

It is intended that this institution of music in the hospitals shall be permanent.

NURSING AND THE HOSPITAL

Conducted by CAROLYN E. GRAY, R.N.,
Secretary, New York State Board of Nurse Examiners,
132 E. 45th Street, New York City

MAKING STUDENTS' PRACTICAL WORK MORE PROFITABLE EDUCATIONALLY*

By ELIZABETH C. BURGESS, R.N., Inspector of Nurse Training Schools, N. Y.

There is food for thought for both executives and educators in this topic, chosen by the program committee as the subject of a paper, and I believe it would be of the greatest value if we could have from those present concrete examples of what is being done in the various schools in an effort to promote the educational value of the student's practical work experience.

What I have to say is but suggestive, and by no means new. I hope, however, it may serve to bring the subject more clearly before us and promote discussion.

Surely no experience holds greater educational value for the student nurse than that of her practical service. At the same time there is no experience in any system of education which carries a greater opportunity for the exploitation of the worker than this same experience under the name of practical training. But if we are to continue, as we have begun during the past few years, to speak of "nursing education" in place of "nurses' training," much greater attention must be given to this practical part of the experience, which even in our most advanced schools occupies a minimum of 90 per cent of the time of the student.

We have, what any other school may well envy, the opportunity for practice and adaptation of the school's instruction to a real situation. We do not have to wait for the opportunity. It is always available for the youngest students. The fact that the service at once meets a real need, and that no artificial situation is created, is an advantage which perhaps we scarcely appreciate until we think of what our loss would be without it.

Advantages of Practical Service

The practical experience of the student is profitable in many ways:

1. It is valuable to the patient, due to the actual nursing care given.

2. To the hospital, as it provides continued nursing service of the most desirable type.

3. To the student:

(a) Since it provides opportunity for drill in the various nursing procedures.

(b) It makes possible familiarity with the clinical aspects of disease.

(c) It provides the needed opportunity for growth.

No hospital should conduct a school for nurses which is not reasonably certain of providing the first two mentioned opportunities for its students in ward experience, *i. e*, drill in nursing procedures and familiarity with the clinical aspects of disease; yet so meager may be the experience used, that student after student is graduated unfamiliar with certain procedures, except as they have been demonstrated, or possibly only discussed, in the class room. The greatest amount of vigilence is needed even when clinical material is plentiful, that each student may receive the experience in carrying out in actual practice procedures which she is expected to be proficient in. Ask recent graduates their method and the technic employed in certain procedures and too frequently you find they have no method and may never have been called upon to practice the procedure. This is testified to by the members of boards of nurse examiners who hold the examinations in practical nursing. When we say that the practical experience of the student makes possible a familiarity with the clinical aspects of disease, again we must admit that it is not always the case, although this situation is without doubt much better than it was ten to fifteen years ago, state resigstration having been of great assistance. Could a record be made of the experience obtained during the period of training of the group here today, we would without doubt bring to light a one sided experience in very many cases.

Examples of the following nature abound:—

Completion of the course without training in the children's wards;—(and in three-fourths of these cases there was no children's wards to go to); no diet kitchen experience; ten to twelve months spent in the operating room; one month only in the care of medical patients; one year spent in special duty with private patients; three-quarters of the course spent as a head nurse in charge of other students. One of the most important services has been gotten by the great majority of nurses through theory only, namely, contagion; and few graduates outside of those whose experience has been entirely in the State Hospital are familiar with the nursing care of mental and nervous diseases.

The past two years has demonstrated very clearly the graduate nurses' lack of practical experience in both of the latter services. The military hospital both at home and abroad have furnished the first practical experience in both the care of acute infectious diseases and in mental nursing for hundreds of nurses. The dislike which is often encountered toward caring for obstetrical patients is largely due to inexperience on the part of the nurse, who knows enough to make her hesitate before the possible complications with which she is remotely familiar.

The third item, provision for the needed opportunity for growth, is that to which the title of this paper more directly applies, and in a sense it is inclusive of the two previous.

*Paper read at the annual meeting of the National League for Nursing Education, Chicago, Ill., 1919.

Professor Dewey calls the educative process a process of growth, and while we may secure in nursing technic and methods by constant drill, and a familiarity with disease through contact with it, if this growth and development which changes the novice into the intelligent, responsible and well poised student who grasps the possibilities of her profession, has not taken place, the most important value of the practical work experience has been lost.

There are many points in the practical work experience provided for our students which may well warrant criticism like that which Helen Marot in her "Creative Impulse in Industry" applies to the factory worker, who, when controlled under so called Scientific Management, is interested in a reward without desire or interest in the work experience. She says: "As the method of doing the work is prescribed in every detail and their only requirement under scientific management is to follow directions with accuracy, they are trained to do their tasks as the children in school are trained. They are trained in routine and to do each task as it is given. This is not education, it is training to do tricks. The worker does not take over what can be called experience from one task to another. He forms certain motor habits called skill. The acquirement of this skill is robbed of its educational value."

In the majority of our schools the most interested group are the probationers. They are the one the instructors like best to teach, and we do not have to search far for the reason. Is it not because of the freshness, alertness and curiosity which marks their advent into what is to them an almost unknown field? At the end of the preliminary course each one invariably tells you that in no previous four or six months of her life has she learned so much. This does not refer entirely to the theoretical course; it is largely due to the educative process experienced in the practical service she has had. The opportunities in the practical work experience are much greater in the months following this introduction to the work, but the abuses of the experience are testified to by dampened enthusiasm on the nurses' part. The light of achievement has been dimmed.

Factors Robbing Practical Experience of Its Value

Some of the factors which rob the experience of its value are:

1. Long hours of service and consequent mental and physical weariness.
2. Lack of relaxation and opportunity for refreshment.
3. The constant practice of procedures long past the time necessary for the perfection of technic.
4. Lack of time to make the connection between class work and practice.
5. The impossibility of carrying out the procedure on the ward as it was demonstrated in the class room, this being due either to lack of proper equipment or lack of time.
6. Service in one department extending long beyond the time when there is either new material or opportunity for further mental growth.
7. Lack of stimulation arising either from entire lack of criticism, a passive attitude on the part of the head nurse, or from a constant fault finding.
8. The requirement of the student of routine work which could as well be performed by others, and which after she has become familiar with it ceases to have an educational value for her. I refer to duties which may well be delegated to maids or other class of workers, such as the cleaning of wards, private rooms and service rooms, folding linen, cleaning large numbers of instruments, making surgical dressings, etc.
9. Another practice frequently found in the larger institutions which takes from the value of the experience and emphasizes routine, is the division of the duties in the ward so that certain things are done by certain individuals wholly. A young nurse just going to the wards cleans all the beds, and does all the dusting on one side of the ward, gives all the baths, etc., on her side, while another gives all the treatments, etc.

These are but some of the practices which actually militate against the educational value of the practical experience. They could readily be multiplied by a study of the procedure and ward routine of almost any hospital.

Without doubt what the student gets out of her experience depends very largely on what she puts into it; but it is incumbent upon the schools to lead the way. Students with meagre educational preparation will go little further than to acquire skill in the technical procedures; the bigger opportunities are not evident to them. It requires an enquiring mind, a live interest and intelligent appreciation of situations and opportunities to grasp the real value of the experience.

The value of the practical experience should be emphasized in every possible way. It should be presented as of foremost value in her course. Instruction in the science should be presented as fundamental and contributory to the final accomplishment of better care of the patient rather than made an end in itself. The test of greatest importance should be in the major subject of nursing. Students should be stimulated by their daily experience, not dulled by its routine. They should never be regarded or allowed to think of themselves as a part of the machinery of the hospital.

Conditions Contributing to Value of Practical Experience

Some of the conditions which I believe will contribute toward the educational value of the practical work experience are as follows:

1. The hours of practical experience daily should not exceed eight.
2. Instruction should always proceed from the simple to the more difficult duties.
3. Each student in addition to certain stated responsibilities should have a certain number of patients for whom she is definitely responsible.
4. Head nurses should be chosen not only for their executive ability but as well for their teaching ability.
5. The nurse instructor.

I have come to think that the nurse instructor should give a great deal more attention and time to the teaching of nursing than she does in the majority of schools today. In a recent issue of "*The Journal*" there appears in the want column an item which is typical of what is being asked of the nurse instructor. It reads "Wanted—Competent instructor of nurses for training school of hospital of 120 beds. Must be capable of teaching all subjects in the standard curriculum." Many nurse instructors are expected to be prepared to teach anatomy and physiology, bacteriology, chemistry, materia medica and hygiene; while the teaching of the subject in which she is a specialist, or should be, is assigned to a recent graduate who has had no particular preparation for teaching. The reason for this is partly because the recent graduate is familiar with the most recent technic employed at the hospital. She surely is of great value as an assistant to the instructor in demonstrating procedures, but teaching nursing is a vastly different thing from holding demonstrations.

The nurse instructor needs all the knowledge she can obtain of the sciences, of psychology and pedogogy if she undertakes the teaching of the major subject in the curriculum.

A physician can give valuable instruction in anatomy and physiology; a bacteriologist, in bacteriology; the chemist and physician, chemistry and materia medica; the dietitian, dietetics; all of which contribute to the necessary preparation of the student. The nurse instructor uses this instruction as the background for her teaching. Many lecturers on medical and surgical disease ignore the fact that emphasis should be placed on the nursing. Nursing technic, too, is frequently taught solely as a technical procedure without its reference to disease. We also frequently find two errors in instruction, that of teaching by demonstration, laying all the emphasis on skill in the accomplishment, and that of paying little attention to the practice,—teaching of principles, but leaving the student to acquire a hap-hazard learning of the practices. The instructor should constantly aid the students to make the connection between class instruction and practical service.

6. A well-known method for keeping alive the interest of the student in technical procedures is the requirement that each student check up the various practical procedures as she performs them during her ward service, until the procedure becomes a thoroughly familiar one. Another help is the keeping by each student of a record of the cases she has cared for, and the filing of these records monthly. These cases may also form the basis of class discussion and required reading, together with bedside clinics conducted by the physician and nurse instructor.

7. The arrangement for class instruction in special subjects and service in the departments in conjunction. Example—The instruction in pediatrics and infant feeding should be given when the student is serving in the children's department. As far as possible the instructor should make use of the material in the department. The student at work in the milk room should have opportunity to watch the progress of the babies for whom she is putting up feedings.

In the same manner the obstetrical class work should be accompanied by service in the maternity department; classes in contagious nursing should accompany the service in the contagious department. Classes in nursing in mental and nervous diseases should accompany the psychiatric experience.

When these special services are provided by affiliation this is usually done. When this does happen the practical experience is teeming with educational value, especially if it is directed by the nurse instructor. Her work in the class room is then so closely related to the work that the students invariably make the connections. They are stimulated, interested and alive to the possibilities which the different services hold for them and intensely interested in the results of their efforts.

At the completion of the preliminary course in one of the units of the Army School of Nursing last winter a demonstration was held as an examination in practical nursing. It extended over three days, two hours each evening, and it represented the first three days nursing care of a patient following on abdominal operation. The demonstration room was arranged to represent a small ward. The head nurse's desk was at one end of the room and on it was the nurses' report book, the physician's order book, material for charting, etc., and a clock. I was puzzled at first by the clock, until I discovered that it began by being 7 A. M. and that as the treatments proceeded the clock proclaimed the passing hours of the day until 7 P. M. was reached. There were two beds in the ward. In one there slept peacefully a rosy cheeked "Mrs. Chase," as that well known dummy was called, in the other was a graduate nurse who was a martyr to the cause of the Army School, and who for three evenings played the part of a very sick and helpless post operative patient. One student was the head nurse. She read the night report to the group of nurses who arrived promptly at 7 A. M. Then things began to happen, the kind of things which would naturally happen to a post operative patient. Bed making; filling of hot water bottle; the morning bath; care of the mouth and teeth; brushing the hair; the temperature, pulse and respiration; fluid diet; a Murphy drip; the measuring of urine. Various symptoms occurred for which an imaginary doctor prescribed and turpentine stupes, a flaxseed poultice and a stimulating enema were called for. Finally the patient had a hemorrhage which called for the elevation of the bed. As the day passed the patient got some sleep, according to the clock, and finally was made comfortable for the night, grateful to the day nurses and happy to see the night nurse who reported at 7 P. M.

The student representing the head nurse was encouraged to question the different members to the extent of her ability. She also assisted with the patient when two nurses were needed and she kept the chart. The questioning and the realistic acting on the part of the patient made the demonstration full of interest to both the students and those looking on.

As an examination in nursing procedures it was probably not as valuable as the usual method of holding practical examinations, but it made the connection at the very beginning of the nursing course between the practical procedures and a sick patient. And it began early in the students' career to bring into the practical experience something of definite educational value.

OBSTETRIC TEACHING HOSPITALS IN LONDON

By all means let the small hospitals which can do so enlarge their existing accommodation for maternity cases and at the same time take steps to improve their teaching, which at present is admittedly defective; but the total number of beds which these hospitals will be able to set aside for midwifery will be quite inadequate to the demand. It would be suicidal for all the medical schools of London to try to establish maternity wards with a sufficient number of beds; this should be attempted by not more than three or four schools, and the students of the other schools should obtain their clinical instruction either at one of the schools furnished with a maternity ward, or, better, at one of the new and large midwifery institutions, of which at least half a dozen will be required in the different areas of London.—Lancet.

Truly, it is hard to be censorious. We have a first duty of understanding. And the life of the tenement-dweller is not to be understood or improved until we make common cause with his essential humanness. That he is the victim of an overwhelming repression is the central fact of his emotional life.—Ordway Tead.

The only competition worthy of a wise man is with himself.—Mrs. Jameson.

Wisdom is to the soul what health is to the body.—Rochefoucauld.

MEETINGS, CONVENTIONS AND CONFERENCES

SEVENTY-FIRST ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION

The seventy-first annual session of the American Medical Association was held at New Orleans, Louisiana, April 26th to 30th, 1920. To accommodate the great crowd of physicians and surgeons who attended this convention, as well as the meetings of many of the allied associations, the hotel accommodations of New Orleans were taxed to the utmost limit, for the interest in the scientific discussions, combined with the growing interest in the health and medical problems of the South, served as a two-fold magnet to draw an unexpected large gathering.

Surgeon-General Wm. C. Braisted, President American Medical Association.

When Dr. Alexander Lambert, the president of the Association, called the meeting of the general session to order on Tuesday evening, April 27th, the Schriners' Temple was filled to overflowing. The most Rev. J. W. Shaw, Archbishop of New Orleans, pronounced the invocation and addresses of welcome were delivered by the Hon. Mr. Riggs on behalf of Mayor Behrman, of the City of New Orleans, Honorable John M. Parker, the governor elect of Louisiana, and Dr. Homer Dupuy, president of the Louisiana State Medical Society. Then followed the introduction and installation of president elect William C. Braisted, United States Navy. In his address Surgeon General Braisted dwelt upon the education of the public in health matters, calling attention to the fact that after the dissipation of life incident to all great wars men inevitably turn to the importance of saving and prolonging it, and healthgiving measures incite at least a temporary interest, and warned his hearers that they would miss a great opportunity if they did not at this time make every endeavor to press home the great self-evident truths of health and long life as they affect national prosperity and race permanence. He contended that the nation's health is a national concern; that it underlies all industrial and business effort, and that it is the fundamental element in successful competition with rival nations, whether under the prolonged strain of commercial contests or the sudden and imperious demands of armed conflict. Giving full credit to the splendid results accomplished by the various agencies at work in the health field, he asserted nevertheless that their combined efforts had not been adequate to the task, and that the campaign for sound health, if it is to be successful, must be one of concerted measures, nation-wide in extent and unflaggingly prosecuted. He pleaded for an abandonment of all halfway measures and conventional methods and for the adoption of a radical, even revolutionary, program which at the same time would be perfectly feasible if undertaken on a scale commensurate with the colossal results desired. To this end he made a forceful plea for the establishment of a national department of health at Washington which, without usurping the activities of the various state and national agencies at work in the health field, would nevertheless work toward a coordinated effort for improving the public health, and make it continuous and progressive instead of desultory and sporadic. While opposed to the tendency to place every public and semi-public enterprise on the government, Dr. Braisted declared himself unqualifiedly in favor of a national department of health, with a cabinet officer at its head, which shall by its very creation give a great object-lesson to the country and shall correlate and greatly expand all the efforts now put forth for the improvement of the race, the prolonging of life, and the full development of physical capacity for work and production.

Dr. Braisted made a strong plea for the teaching of hygiene in primary schools and expressed the conviction that those interested in promoting the public health have been guilty of a basic error in devoting an inordinate amount of time and attention to the health of the adult already chained by lifelong habits. As childhood is recognized as the time to acquire certain qualities indispensable to future development and ultimate success, he proposes that we get to the root of the matter, the foundation of the child's education, in order that later we may have lawmakers and lawabiding citizens who will put healthy living ahead of every other kind of living. "How," Dr. Braisted asks, "can we expect the lad or maiden who has for five, ten or fifteen years been goaded to study grammar, mathematics, and languages, on whom there has been exerted insistent pressure to acquire mental attainments, to be easily persuaded later on that a subject kept in the background or displaced in favor of something else, is the one of paramount importance! We cannot expect the youth to believe that hygiene, physiology and health are matters of primary importance and that their teachers really esteem them such when everything else has gone ahead of these subjects." To correct this situation Dr. Braisted would have our public schools become the health centers of their respective communities.

Touching upon the question of the medical curriculum Dr. Braisted felt that in the main the curriculum of our leading medical colleges was satisfactory, judged by the results, but that it is a well recognized fact, in the first place, that all recent graduates and many old practitioners are profoundly ignorant of drugs and how to prescribe them so as to get the desired results, and, in the second place, that hygiene and sanitation are not given sufficient prominence in our medical courses.

Dwelling upon the kind of men wanted in the medical profession, Dr. Braisted said, "We want the men who take up medicine in America to be big men, big in heart, big in brain, blessed with vigorous health. The possession of a store of facts is nothing compared with native ability and sterling integrity of character. . . . The medical profession must agitate in season and out of season for a high standard of physical capacity as a basis for intellectual achievement and for normal conduct. It must show its appreciation of proper values by using every means to divert from its ranks those who have failed to demonstrate the possession of principle as well as of mental proficiency."

The report of the council on health and public instruction, submitted by its chairman, Dr. Victor C. Vaughan, to the house of delegates, contained one or two matters of interest to hospitals. "There is a real demand," runs the report, "for medical graduates to serve as interns in hospitals, but this demand could not be met even if the number of medical colleges and the number of graduates annually should be doubled or trebled. The number of hospitals seeking interns has been tremendously increased and new hospitals are being rapidly erected. Last year 1,126 hospitals with a total of 270,000 beds were all seeking interns. Counting that one intern is needed for every 30 beds, these hospitals would require 9,000 interns each year, more than three times the number of medical graduates in 1919. No such number of graduates is necessary to meet the normal demand for physicians. The intern problem requires some other remedy." The report suggests (a) that internship might be extended to two years, by which the annual output of graduates would supply twice as many hospitals; (b) the hospitals might pay salaries to recent graduates, inducing them to remain for several years as resident physician or surgeon; (c) hospital assistants or nurses might be trained to do much of the work now devolving upon the intern; (d) the situation is relieved in some hospitals by the employment of stenographers who at the time patients are examined, take down histories from dictation by the members of the attending staff. Meanwhile the number of hospitals is now so large that only those will be able to secure interns which are willing to furnish a valuable clinical training.

Another section of this report is devoted to consideration of measures of importance in medical education and dwells upon the question of improving hospital service, which it regards as one of the most important problems now confronting the medical profession. It dwells upon the hospital work thus far done by the American Medical Association, the attitude of hospitals toward this work, and the growth of its service, and urges its expansion.

The address of Dr. Alexander Lambert, the president of the Association, delivered to the house of delegates, dwelt upon the slowly developing realization of the influence and value of hospitals as institutions not only for the care and treatment of the sick but also for the education of physicians. He advocated the appointment of a standing committee on hospitals to cooperate with the other agencies represented in the American Conference on Hospital Service; in fact, he recommended that the house of delegates create a council on hospitals and amend the by-laws to this effect.

The various sections of the Association carried on the usual scientific discussions of which those of the section on preventive medicine and public health are of greatest interest to the hospital field. Among these papers we may call particular attention to the address of the chairman, Dr. James A. Hayne, of Columbia, S. C., on the "Rights of the Child," the address of Mr. Edwin A. Peterson of Washington, D. C., on "What the American Red Cross can Contribute to the General Health Program," and the paper by Dr. Lloyd Noland, Birmingham, Ala., on the "Work of the Department of Health of the Tennessee Coal, Iron & Railroad Company." Among the other subjects treated in this section were: "Desirable Trend of National Health Policies," "The Training of Industrial Physicians," "The Difficulties of Public Health Administration," and "The Necessity for the Reporting of Venereal Diseases by Physicians."

The scientific exhibit was located in the Josephine Hutchinson Memorial Building of the Tulane University, and included, among others, exhibits of the medical department of the United States Army, the Louisiana State Board of Health, and the American Medical Association.

The conference was not without its lighter side. There was the customary president's ball, with a number of tableaux representing medical subjects of interest. The scenery and settings were especially painted and prepared to suit the theme of the carnival. On April 9th a Fête Champètre was given at the city park and during the convention various trips were arranged through the historical and beautiful sections of New Orleans for the visiting ladies. These trips were personally conducted by members of the Louisiana Historical Society. The usual American Medical Golf Association tournament was held at the New Orleans Country Club under the auspices of the local committee.

INDUSTRIAL PHYSICIANS MEET

The annual convention of the American Association of Industrial Physicians and Surgeons held at New Orleans April 26 and 27, 1920, was attended by a small but enthusiastic body of industrial physicians and surgeons from all parts of the country. Those who took the long trip were well repaid by the excellence of the program and the practical nature of the discussions.

The address of the president, Dr. Harry E. Mock, was a very practical vision of the future of industrial medicine. "Wound Infection in Industry" was succinctly treated by Dr. Drury Hinton, of E. I. du Pont de Nemours & Co. Dr. J. A. Watkins of the Lunkenheimer Company, Cincinnati, reviewed the progress of training for the industrial physician. Dr. Edward Martin, commissioner, Department of Health of Pennsylvania, outlined the very practical plans of the Pennsylvania Department of Health in the treatment of venereal disease. A scientific contribution to the subject of industrial physiology was given by Dr. A. H. Ryan of the Scovil Manufacturing Company, who dealt with the subject of fatigue and efficiency tests.

The subjects which excited the most earnest discussions were those of the round tables on "The Problems of First Aid," "Standardized Surgical Methods in Industry," and "The Problem of Compensation for Sickness." The first brought a review of the actual plans in operation in industries in handling and treating first aid cases. The second brought out the fact that standardized methods are out of the question but that minimum standards may be established on which there could be an agreement.

The third gave a résumé of the argument for and against health insurance as proposed in this country. The presence of Dr. Norman Walker of Scotland, who spoke favorably of the English experience, was of special interest.

In addition to the program of the Association the subject of industrial medicine was treated in several contributions to the Section on Preventive Medicine and Public Health of the American Medical Association.

The Association of Industrial Physicians and Surgeons went on record for an enlarged program for the promotion of industrial medicine. An aggressive policy was agreed upon to promote membership and increase the service of the Association to its members. The dues were increased for this purpose, and optimism was expressed on all hands in regard to the work to be done. Officers were elected as follows: Dr. Otto P. Geier, of the Cincinnati Milling Machine Co., was elected president; Dr. I. R. Crowder, of the Pullman Co., Chicago, Ill., vice-president; Dr. W. Irving Clark, of the Norton Co., Worcester, Mass., second vice-president; and Dr. Francis D. Patterson, Department of Labor and Industry, Pennsylvania, secretary-treasurer.

NATIONAL TUBERCULOSIS ASSOCIATION MEETS

The annual meeting of the National Tuberculosis Association held at St. Louis, Mo., April 22 to 24, was attended by over seven hundred delegates from all parts of the United States, from Canada, and from the Philippines. The history of the fifteen years of activity of the organization is one of rapid growth, broadened scope of endeavor, and increased success in achievement. The movement was launched by a few earnest philanthropists, and in its first year engaged the support of various organizations whose budgets aggregated not more than $100,000. With the present large association enrollment, the executive office anticipates the expending of more than $4,000,000 in carrying on anti-tuberculosis work during 1920. Among important tendencies of the movement made manifest at the convention were the increasing responsibility, activity, and power of the state association, the significant growth of the Public Health Crusade, the standardization movement as applied to the classification and grading of tuberculosis sanitoria, and the movement to evaluate and coordinate the existing methods of dealing with tuberculosis.

In the presidential address, Dr. Victor C. Vaughan laid emphasis upon the increased morbidity as contrasted with the decreased mortality, and upon the necessity of bringing about migration from the cities to the country. As an aid to the back-to-land movement, Dr. Vaughan urged the improvement of housing conditions, especially in the rural districts.

Nursing, medical, and sociological sectional meetings, as well as Advisory Council meetings were held, at which subjects of vital interest to the respective groups and to the association as a whole, were discussed. Nursing methods and programs, occupational therapy for tuberculous cases, administrative problems in public health nursing with reference to the function of the national, state, and local organizations, in relation to the development of programs, were among the topics emphasized in the Nursing and Advisory Council meetings. The effect of influenze upon tuberculosis, heliotherapy, the Negro problem in the clinical aspects, the etiology of tuberculosis, and the use of tuberculin in various forms, were treated at the medical conferences. Tuberculosis as a health program, the tuberculous soldier, and the problems of industrial tuberculosis in their relation to business and to after-care of patients, the problem of tuberculosis in the Philippines, and the Modern Health Crusade, were topics featured in the sociological meetings.

Resolutions of national significance were drawn up by the Committee on Resolutions consisting of Dr. Gerald B. Webb, chairman, Dr. S. A. Knopf, Dr. Josephine Milligan, Dr. W. L. Dunn, and Dr. Phillip King Brown, and include the following: That animal experimentation conducted under proper supervision be continued to further the development of research in tuberculosis, and that restrictive legislation be disapproved; that the Association's deep appreciation of the great work of Sir William Osler be recorded and an expression of profound sympathy be sent to Lady Osler in her bereavement; that the president appoint a committee to investigate and to study the industrial colony project, in order that a proper course for the organization of such colonies and communities be ascertained; that the school authorities adopt plans for the provision of a sufficient number of open window rooms in every new school building to be erected in the United States; that legislation be initiated by the federal government to deal with the problem of the tuberculous soldier, involving the increase of salaries for the personnel of the United States Public Health Service to permit the securing and training of competent medical officers, immediate appropriations for the construction of a large number of sanitoria and new units at Public Health Service hospitals in order to provide ample accommodations for hospital cases of tuberculosis, and provision for the training and employment of arrested tuberculous beneficiaries in such occupations as will conduce to their continued health.

The officers elected were the following: President, Dr. Gerald B. Webb, Colorado Springs, Colo.; Honorary Vice-Presidents, General William C. Gorgas, Washington, D. C., and Colonel George E. Bushnell, Concord, Mass.; Vice-Presidents, Dr. Phillip King Brown, San Francisco, Cal., and Dr. James Alexander Miller, New York City, N. Y.; Secretary, Dr. George M. Kober, Washington, D. C.; Treasurer, Mr. Henry B. Platt, New York City; Clerk, Mr. Wadleigh B. Drummond, Portland, Me.; Executive Committee: Dr. H. Kennan Dunham, Cincinnati, O.; Dr. W. L. Dunn, Ashville, N. C.; Miss Edna L. Foley, Chicago, Ill.; Dr. Alfred Henry, Indianapolis, Ind.; Dr. Walter R. Steiner, Hartford, Conn.; Dr. Victor C. Vaughan, Ann Arbor, Mich.; Dr. William Charles White, Pittsburgh, Pa. The new directors are as follows: Mr. Henry B. Platt, New York City; Dr. Livington Farrand, Washington, D. C.; Dr. James Alexander Miller, New York City; Mr. Homer Folks, New York City; Dr. William N. Anderson, Omaha, Nebr.; Prof. Reed Smith, Columbia, S. C.; Dr. A. C. Bachmeyer, Cincinnati, O.; Mr. J. V. A. Smith, Seattle, Wash.; Dr. Allen H. Williams, Phoenix, Ariz.; Mr. H. R. Cunningham, Helena, Mont.; Dr. David R. Lyman, Wallingford, Conn., and Dr. George Dock, St. Louis, Mo.

SANATORIUM ASSOCIATION ADOPTS STANDARDIZATION REPORT

At the fifteenth annual meeting of the American Sanatorium Association held in St. Louis, Mo., April 22, in conjunction with the National Tuberculosis Association, the final report of the Committee on Standardization of Sanatoriums, recently completed, was adopted and submitted to the National Tuberculosis Association for distribution among all the sanatoriums of the country. The purpose of the standardization movement was defined as the establishing of minimum standard requirements and the grading of the various sanatoriums to aid both the

public in forming authoritative opinions concerning the efficiency of the institutions, and the sanatoriums in improving their services through knowledge of what constitutes standard practices, and of what development and improvement are taking place in other institutions. The plan is to classify sanatoriums—to set standards, rather than to standardize, and with this aim in view, fairly high, but reasonable goals of attainment have been set, which are calculated to stimulate general improvement of service.

The rating schedules which will be sent to all sanatoriums, have been adapted to include all classes of tuberculosis institutions treating all forms of tuberculosis. A scheme for rating boarding houses for tuberculous cases has been developed. Ratings and inspections, when necessary, will be made by a representative commission of the National Tuberculosis Association and not by an individual. The first tabulation will be made from unchecked reports returned by the institutions. The reports will not be published, but later, annual standardizations based on such returns, checked as may be necessary to substantiate claims, will be published in the *Journal of Outdoor Life*.

The scheme of rating as worked by the committee is as follows:

Standardization shall be based on the following factors: Location, etc., plant and equipment, administration, and medical service.

There shall be prepared a schedule or schedules under each factor (as shown on rating blanks), which shall include all items appropriate to it in the judgment of the rating commission, subject to the restriction that items shall, as far as possible, be of such a character that establishment of claims thereunder may be based on question of fact, and as little as possible left to the discretion or opinion of those charged with the duty of inspection. The items in these schedules shall be divided into three classes, "C," "B," and "A."

"C"—Those deemed essential for admission to standardization.

"B"—Additional items which add to the institution's usefulness.

"A"—Such items of superiority as deserve recognition.

Those falling below the minimum requirements as defined "C" herein, shall be rated "not qualified," or by some similar term. All others shall be rated into classes "A," "B," and "C," without reference to their size or form of government.

Each schedule shall be checked, and the classification of the institution (A, B, or C) as regards it established.

To claim "A" in any schedule, an institution must have all the qualifications in that class; likewise for "B" and "C."

Factors shall be assigned weights.

Classes of items shown in schedules as "A," "B" and "C" columns shall be assigned values.

Factor ratings shall be the percentages which the schedule values are of the factor weights.

Final ratings (classification) shall be the sum of the factor ratings.

NOTE—Under each of the factors, Location, etc., and Plant and Equipment, there is but one schedule. Under the factor, Administration, there are two of equal value, the average of these two to be used in working out the percentage. Under the factor, Medical, are seven schedules which are also weighted as shown.

Accompanying the general statement of the scheme of rating are the rating blanks covering all the items to be considered as factors in the standardization of sanatoriums.

The American Sanatorium Association elected the following officers: President, Dr. Lawranson Brown, Saranac Lake, N. Y.; vice-president, Dr. A. T. Laird, Duluth, Minn.; secretary-treasurer, Dr. E. S. McSweeney, New York City, N. Y.

SOCIAL WORKERS MEET IN NEW ORLEANS

The National Conference of Social Work, held in New Orleans April 21, 22, 1920, devoted no small amount of time to the discussion of the various aspects of the public health campaign. The section on health under the chairmanship of Mr. George J. Nelbach, executive secretary of the Committee on Tuberculosis of the New York State Charities Aid Association, held seven section meetings and one general session, where the papers and discussions centered about the following topics: "Team Work in the Public Health Movement," "Recent Gains in State Health Legislation." "The Social Responsibility of the Hospital," "Health Work and the Red Cross,'" "The Next Steps in Public Health Nursing," and "Special Health Problems of the Immigrant."

At Wednesday evening's general session of the conference, which was a joint session of the Health Division with the Division of the Local Community, Mr. Royal Meeker, Commissioner of Statistics, United States Department of Labor, addressed the convention on the "Standards of Living Essential to Health." During the past year Mr. Meeker has been acting as the chairman of the Committee of Specialists in Economics, Sociology, Preventive Medicine and Statistics, appointed by the Division on Health immediately following the conference's annual meeting at Atlantic City last year to study this subject and submit a report. In discussing the topic of "Team Work in the Public Health Movement," Dr. Chaillos Cross of the State Board of Health of Mississippi described the County Model Health Campaigns of Mississippi conducted by the State Board of Health in conjunction with the International Health Commission of the Rockefeller Foundation and the Rockefeller Institute for Medical Research.

At Thursday afternoon's session, Mr. Robert G. Patterson, Akron, Ohio, read a paper on the Hughes Act of Ohio, and its amendments: Lessons to be Drawn from Securing Its Enactment, and Experience Had Thus Far Under Its Administration. The topic of Social Responsibility of the Hospital was covered by two papers, one by Mr. Joseph J. Weber, managing editor of THE MODERN HOSPITAL, Chicago, on the "Role of the Hospital in the Public Health Campaign." The other by Miss Edna G. Henry, president of the American Association of Hospital Social Workers, Indianapolis, on "Bridging the Chasm."

The seventh and final session of this division was given over to several miscellaneous papers of which one of the most interesting was that of Mr. E. G. Routzahn, associate director Department of Surveys and Exhibits, Russell Sage Foundation, on "Selling Health to the People."

The Health Division was not alone in the discussion of public health problems, for they were discussed by speakers in several other divisions, notably in the children's division and the local community division, all going to show that the social workers of the country are thoroughly alive to the health aspects of their work.

Mr. Allen T. Burns, director of Americanization Studies for the Carnegie Foundation, was elected president of the conference for 1921. Mr. Robert W. Kelso, secretary of the State Board of Charities of Mississippi, was elected First Vice-president; Mr. Marcus C. Fagg, Superintendent of the Children's Home Society of Florida, Second Vice-president, and Miss Mary E. Richmond, Director of the Charity Organization Society Division of the Russell Sage

Foundation, Third Vice-president. Dr. Richard Bolt, Baltimore, Maryland, was elected chairman of the Health Section. The new members of the Executive Committee are W. T. Cross, Chicago; Otto W. Davis, Minneapolis; Owen R. Lovejoy, New York; W. J. Norton, Detroit; and Gertrude Vail, Denver. The next annual conference will be held in Milwaukee in June, 1921.

ILLINOIS HOSPITAL ASSOCIATION MEETS IN CHICAGO

At the convention of the Illinois Hospital Association held at the Hotel Sherman, Chicago, April 16, delegates from all over the state gathered to review the work accomplished since the organization of the society in February, 1919, to discuss issues vitally affecting hospital administration, and to formulate a comprehensive program of activities for the ensuing year. The function of the hospital was defined primarily as the caring for the sick, in accordance with the most approved scientific methods, and the organization pledged itself to aid in maintaining the highest standards of hospital efficiency, and to promote the welfare of the sick.

The need for an organization of this sort has long been felt by the hospitals of Illinois. There had previously been no association to represent hospital interests as apart from professional and group interests. Illinois hospitals, as a group, had had no power to determine or direct policies affecting their own administration. To remedy this lack certain members of hospital boards, among whom were Mr. Wm. J. Rathje, Englewood Hospital, Mr. A. J. Pflaum, Michael Reese Hospital, Rev. Peter Peterson, Augustana Hospital, Dr. M. L. Harris, Policlinic Hospital, Dr. Emil Ries, Post-Graduate Hospital, Dr. Wm. L. Noble, West Side Hospital, Dr. C. O. Young, Washington Park Hospital, and Dr. E. T. Olsen, Englewood Hospital, determined upon the organization of such an association. A preliminary meeting was held in September, 1918, and on February 7, 1919, the first meeting of the Illinois Hospital Association was held, at which eleven hospitals were represented. Officers were elected, by-laws prepared and adopted, and an Executive Committee appointed with power to act on all matters affecting hospitals and the care of the sick therein. It was voted to invite all hospitals in the State to become members.

The meeting of this year was opened with an address by the president, Dr. M. L. Harris, of Policlinic Hospital, in which the work and activities of the Executive Committee during the past year were described. The bills opposed during the last session of the Legislature, the nursing law, and the two year course of training for nurses were discussed. The opinion of the Attorney-General in regard to the powers and obligations of the Department of Registration and Education relative to the nursing law was read. An important point of the opinion, emphasized by Dr. Harris, was, that the hospital reputability shall be judged by its general efficiency in the care of the sick and the training of nurses, and not by the daily average of patients cared for, or the courses offered, or by any arbitrary requirement laid down by the department of registration and education.

In a report on the movement to standardize hospitals, Dr. Olsen, of the Englewood Hospital, Secretary of the Association stated, that in as much as there are now fourteen different bodies attempting to work out standardization programs for hospitals it was appropriate that hospitals should interest themselves in the welfare of their own conduct and formulate decisions as to what constitutes proper hospital administration and efficiency. Dr. Olsen defined hospital standardization as synonymous with hospital efficiency, and stated that any standardization program which did not take into consideration the size and location of the various hospitals in the State, the conditions under which they were operating, the willing and voluntary co-operation of the hospital itself, and the vested property rights of the hospital, could not be imposed. Activities which Dr. Olsen recommended should have increased attention by members of boards of trustees of all hospitals, and which would automatically increase the efficiency of the institution were; an intimate knowledge of the care and attention given patients; purchase and issue of supplies; co-operation of staff and hospital; frequent, regular meetings of staff; adequate record keeping (including clinical histories) and their proper protection and preservation; the providing of facilities for and the proper supervision of laboratory work commensurate with the demands of the hospital; and a proper supervision of the work of the training school including the amount and character of instruction given student nurses, their working and living conditions and opportunities for recreation.

Further emphasis was placed upon the necessity of hospitals becoming active in formulating standards by which to judge hospital efficiency and service by Dr. Humiston of the West Suburban Hospital.

A motion was made and carried to appoint a committee of nine, subdivided into committees of three, to make a survey of the hospitals in the State (grouped according to their bed capacity) and recommend a basis upon which their efficiency may be measured. The committee is also to act as an advisory body to aid hospitals, deficient in any respect, to increase their efficiency.

The two year course of training for nurses, approved by the State Legislature was discussed, and a motion that all hospitals be urged to adopt this course was carried. Dr. Noble also presented a tentative curriculum for the two years course with the suggestion that it be used as a basis for the course of instruction given to nurses.

The report of the Secretary showed a present membership of 76 hospitals representing a bed capacity of over 7,000.

Among other speakers and those taking part in the discussions were: Dr. Clifford U. Collins, Peoria; Dr. J. H. Franklin, Spring Valley; Dr. A. H. Dollear, Jacksonville; Dr. George B. Kelso, Bloomington; Dr. R. Hazen, Paris; Dr. J. B. Kaufmann, Blue Island; Dr. R. M. Orr, LaSalle; and Dr. T. A. Johnson, Rockford.

The present Officers were re-elected and are as follows: Dr. M. L. Harris, Policlinic Hospital, President, Dr. Wm. Olsen, Englewood Hospital, Secretary, Dr. C. O. Young, L. Noble, West Side Hospital, Vice President, Dr. E. T. Washington Park Hospital, Treasurer.

Board of Directors: Mr. A. J. Pflaum, Michael Reese Hospital, Mr. Wm. J. Rathje, Englewood Hospital, Rev. Peter Peterson, Augustana Hospital, Dr. Emil Ries, Post Graduate Hospital, Dr. Martin M. Ritter, Columbus Hospital.

BRITISH COLUMBIA HOSPITAL ASSOCIATION HOLDS CONVENTION

At the convention of the British Columbia Hospital Association to be held at Vancouver, British Columbia, June 23-26, issues of paramount interest to hospitals will be discussed. Every phase of modern hospital administration will be treated, as is shown by the tentative program. There will be a symposium on nursing, at which questions such as these will be discussed: Nursing Standards, The University in Relation to Nursing Education, The Organ-

ization of a Public Health Nursing Service, The Work of Voluntary Societies in a Public Health Nursing Service, and the Coordination of State and Private Enterprises in Public Health Nursing Services. The Training School in the Small Hospital will also come up for discussion, as well as the present burning question of how the number of applicants for nursing training can be increased.

The Ward Attendant Group will also come up for discussion.

In the medical session of the conference papers will be read on the following subjects: The Scope of Medical Service to Be Expected in Rural Hospital; the Clinical Laboratory for Small Hospitals—Its Equipment and Operation; the Importance of Keeping Case Records in Every Hospital; the Minimum Requirements of Hospital Standardization; and Hospital Dietetics in Relation to the Scientific Treatment of Disease.

The business session will be devoted to the discussion of hospital financing, the Standardization of Hospital Accounting, the Organization and Management of Hospitals, and the important subject of Uniform Monthly Reports to Boards of Directors.

THE ATLANTA CONVENTION

The first Biennial Convention of the three greatest nursing organizations in the world ended in Atlanta on April 17. It was the twenty-fifth annual meeting of the National League of Nursing Education, the twenty-first annual meeting of the American Nurses Association, and the seventh annual meeting of the National Organization for Public Health Nursing. The nurses, numbering more than three thousand, discussed the present and future outlook of nursing with a spirit of enthusiasm, democracy, and business-like efficiency. For nine days meetings were held—morning, noon, and night—in the Tabernacle and the Auditorium, but to the surprise of some of the Atlanta folk, there was no falling off in attendance. The delegates and visitors were there to learn and they steadfastly refused to think of the movies, the shopping district, or the charming country drives.

Although each of the associations had its own sessions, there were joint meetings in which they discussed matters of interest to all. In one of the general assemblies the Sheppard Towner Bill was indorsed. In another, the request of the American Legion for a cash bonus to be given by the Government to every participant in the great war, regardless of the length of service, was discussed, and resolutions were passed to the effect that the nurses are not in sympathy with the movement, that the men went into the War because they wished to be of use to the country, and not because of any desire for pecuniary reward. The associations are of the opinion, however, that those who were disabled in service should be given extra assistance.

For some time the National Organization for Public Health Nursing has had offices at 156 Fifth Avenue, New York City, and a branch office in Chicago. At the Convention in Atlanta, it was decided that joint offices of all three national nursing bodies should be established in New York City. This is a great advance and will, without doubt, result in better cooperation and greater efficiency in the future of the whole nursing profession.

Miss Katherine Tucker, president of the National Organization for Public Health Nursing, and superintendent of the Philadelphia Visiting Nurse Association, presided over the meetings of the public health nurses. The by-laws of the National Organization for Public Health Nursing were revised, the most important change being the striking out of the voting-by-mail privilege. This was accomplished after a very spirited discussion with arguments that showed considerable determination.

The rapid development of industrial nursing in recent years led to the formation of a separate section under the National Organization for Public Health Nursing, with the Appointment of officers and the passage of resolutions. Separate sections were also formed in School Nursing, Child Welfare, and Tuberculosis.

The National Organization for Public Health Nursing, the only nursing body which admits lay members, included in its program a session for non-professional members, devoted to public health nursing administration. Special emphasis was placed on the need and proper management of nutritional clinics, publicity aids in public health nursing, newer fields of public health nursing, rural needs and rural problems, the protection of school children, and the recruiting of student nurses for the training schools.

The next convention will be held in Seattle in 1922. Invitations from Des Moines, Kansas City, Salt Lake City, and Seattle were extended, but the Coast City won through the energy and enthusiasm of the "booster delegates," who vowed that Seattle could surpass any other convention city in the United States.

Miss Edna Foley, superintendent of the Chicago Visiting Nurse Association, was elected president; Miss Elizabeth Fox, director Bureau of Nursing, American Red Cross, Washington, D. C., first vice-president; Miss Jessie Marriner, Alabama State Supervising Nurse, second vice-president; and Miss Olive Chapman, director of nursing in the Mountain Division of the Red Cross Section, secretary.

The Old Order Changeth, Yielding Place to the New

The *British Journal of Nursing* presents from *The Gentlewoman* this telling little sketch, showing the gap that has been bridged between the former days of "Sairy," with her bottle of drops to cure all ills, and the present era of the "Registered Nurse," whose standardized training has raised her profession to the dignity it deserves.

The Foreordination of Fate

Two days in vain may'st heed thee of death—
The appointed and the unappointed day.
On the first, there's no healer thy life can save
On the second, no sword the life can slay.

Pindar of Kuhistan.

OHIO HOSPITAL ASSOCIATION MEETS

WHEN the president of the Ohio Hospital Association, the Rev. M. F. Griffin of St. Elizabeth Hospital, Youngstown, Ohio, tapped the table with his gavel and called to order the sixty-odd members and guests of the association who had foregathered for the opening session of the sixth annual convention, he plunged immediately into the vital subject of the future relation of the Ohio Hospital Association to the American Hospital Association. Indeed, this was the central theme of his presidential address. He contended that while the hospitals of Ohio had many problems to face and solve—problems such as the increased cost of supplies, equipment, and building materials, the shortage of nurses due to the great demand for graduate nurses in the social service and public health fields, compensation for industrial cases,—one of the big problems was how the hospitals could take their rightful place in the larger public health program upon which the American public had embarked. Father Griffin felt that all the activities of the public health movement should revolve about the hospital. To make this possible, the hospital must adopt a wider principle of operation, which would make possible greater cooperation with many outside local and national agencies interested in public health work. This cooperation, Dr. Griffin argued, could best be accomplished by having the Ohio Hospital Association affiliated with the American Hospital Association. Under such an arrangement the Ohio Hospital Association as well as other state associations would preserve their own organization and meet the problems peculiar to their communities, while the American Hospital Association would function in the broader national sphere, coordinate the activities of the various state societies and serve as a channel through which the state associations could cooperate with other national organizations engaged in health work.

Following Father Griffin's suggestive address, Dr. A. R. Warner, executive secretary of the American Hospital Association read a paper (printed in full on page 480 of this issue) on "A Stronger Organization of the American Hospitals," in which, in contradistinction to Dr. Griffin's address, he presented this important topic from the standpoint of the American Hospital Association.

In his report as secretary, Dr. E. R. Crew, Superintendent, Miami Valley Hospital, Dayton, Ohio, called attention to the fact that besides transacting the routine business of the Association, the Executive Committee had delegated to its Committee on Constitution and Rules the task of formulating such changes in the Association constitution as may be necessary to make possible affiliation between the Association and the American Hospital Association, and had had conferences with the State Department of Health on a standardized form of annual report for the hospitals of the state, and with the State Industrial Commission on the question of rates of compensation to hospitals for industrial cases.

Tuesday evening's meeting might very appropriately be called the public officials' session, for it was devoted to a discussion of the relationship of the state to the hospitals along certain lines. Mr. H. G. Southmayd, Chief, Bureau of Hospitals, Department of Health of Ohio, read a well thought out paper on the "Relation of the State to Hospitals in the Light of Recent Legislation" and what has been accomplished under that legislation. Mr. Southmayd's paper showed the splendid spirit of cooperation that exists between the hospitals of the state and the State Department of Health. Mr. Southmayd reviewed the provisions of the Tully Resolution passed by the Ohio Legislature about a year ago, which called for the establishment of a Bureau of Hospitals in the State Department of Health, a survey of the present hospital situation in the state, and a report based on this survey to be made to the legislature by the first of next year as the basis of further legislation on hospital matters. He pointed out that the purpose of the legislation was to promote the health of the citizen of the state through the provision of adequate and efficient hospital service. Some conception of what remains to be done along this line, aside from raising the standards of existing hospitals, may be gathered from the single fact brought out by the Bureau's survey, that twenty-three of the counties in the state have no hospital beds within their boundaries.

Mr. T. R. Fletcher of the Industrial Commission of Ohio spoke on "The Industrial Commission and the Hospitals." Mr. Fletcher stated that although the executive committee of the Ohio Hospital Association had recently appeared before the Industrial Commission for a hearing on the readjustment of payments for industrial cases, the commission thought best to defer action on the matter until after this meeting at which it was hoped to get the consensus of opinion of the membership of the Association.

Delegates of the Ohio Hospital Association assembled on the steps of Memorial Hall, Columbus, Ohio.

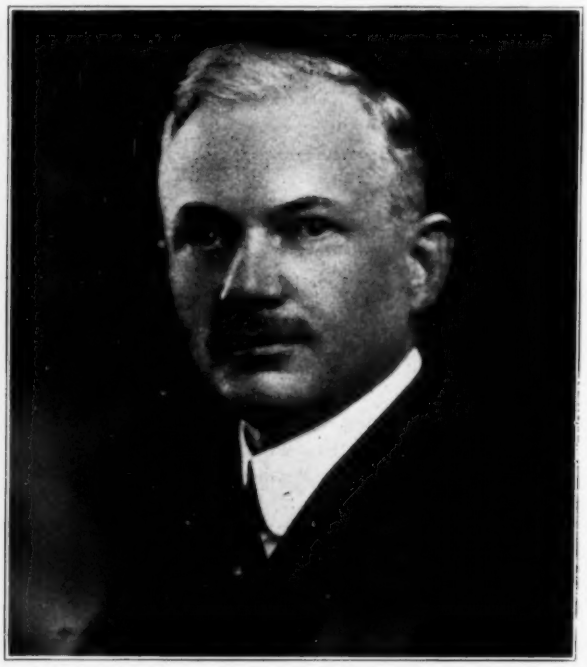
As the result of the recent conference the following scheme was suggested:

(1) That the Industrial Commission approve the principle of cost for hospital service rendered as the basis for fixing hospital rates.

(2) That individual agreements or contracts be entered into with each hospital on the basis of its average daily per capita cost.

(3) The average daily per capita cost to be secured from the annual reports made to the Bureau of Hospitals of the State Department of Health.

Nursing problems and dietetics were the centers of attention at the round table discussions which occupied the



P. W. Behrens, M.D., newly elected president of the Ohio Hospital Association.

forenoon session of Wednesday morning. Miss Ida May Hickox, Chief Examiner of Nurses of Ohio, conducted the round table on nursing, while Mr. Frank E. Chapman, Superintendent Mt. Sinai Hospital, Cleveland, Ohio, served as chairman of the round table discussion of dietetics.

Miss Hickox in opening the discussion reviewed the work of the Nurse Registration Board of Ohio; and stated among other things, that the public was demanding higher standards of nursing training just as the public was demanding higher standards from the hospitals; that the curriculum of yesterday was now out of date and ineffectual for the needs of today and that the great problem was how to meet the demands of the public for a higher type of education and at the same time meet the nursing needs of the hospitals and the community at large.

The question was asked as to whether the present shortage of nurses could be met by shortening the course of training to two years. Miss Hickox declared she could not see how nurses could receive the training the public demanded in less than three years on an eight-hour basis —a basis which all hospitals must shortly adopt if they expect to have any pupil nurses at all. Miss Hickox asked the hospitals especially to discourage pupils changing from one hospital to another, a practice which was now quite common, due to the general spirit of unrest. She contended that if after a fair hearing a pupil was found undesirable by one school she was undoubtedly undesirable for others.

Miss Mary Jamison, Superintendent of Grant Hospital, Columbus, stated that during the past six years she has been in the habit of giving talks to the girls in the graduating classes of nearby high schools in an effort to stimulate an interest in nursing as a calling. She speaks not as a representative of Grant Hospital, but of the League for Nursing Education. She attributes her success in getting all the pupil nurses she needs very largely to her educational efforts among high school girls.

Dr. E. R. Crew, Superintendent of Miami Valley Hospital, expressed the belief that some scheme could be worked out whereby the high schools could be tied up with the hospitals so that girls in their final high school year could take an elective course leading to nursing much as the scheme in some localities where the schools have an arrangement with department stores for practical work on salesmanship. This plan he contended would set them to thinking along the lines of nursing as an occupation. The suggestion met with such approval that a special committee was appointed with Dr. Crew as chairman to work out some such plan of co-operation with the high schools of the state.

A plea for the recognition of the need for trained attendants and some plan for their training was voiced by Miss Alice Thatcher, Christ Hospital, Cincinnati, Ohio.

Miss Marie Lawson, R.N., contended that if nursing schools were put on an A1 basis, if the homes were made attractive, if the nurses were properly fed and had a working schedule of eight hours, they would have the best opportunity for getting the pupil nurses they needed.

On the question of non-resident pupil nurses, Dr. Crew knew of no strong reason for not adopting the plan where

Rev. M. F. Griffin, President of the Ohio Hospital Association, 1919-20, elected to five year trusteeship.

housing facilities were not available. The great objection, of course, would be in the lack of control of the evening hours off duty. It was pointed out that in some eastern hospitals the graduate nurses get sufficient salary to enable them to live outside the hospital.

In the discussion on dietetics, the question of what procedures had been adopted by the various hospitals to

effect economies in dietary costs, was raised. One or two hospitals stated they had introduced the cafeteria system for their nurses and help with success. This elicited the observation that while the system was all right as an economy and labor-saving device in the presence of a labor shortage, it did not create the home atmosphere for which the hospitals were striving, and should therefore be abandoned as soon as the stringency in the labor market was reduced. Dr. Bachmeyer stated the cafeteria system had worked successfully at the Cincinnati General Hospital for the nurses for breakfast only, and for the help for luncheon only. Its success with the help he felt was due to the fact that they get their other meals at home.

Considerable difference of opinion developed on the question of who should do the dietary purchasing, some contending that the dietitian should; others that she should not on the ground that the practice of having the consumer of goods do her own purchasing was wrong in principle. This does not mean that the purchasing agent should not consult with the dietitian on frequent occasions. It was pointed out that in the purchase of green goods during the summer months the purchasing agent should co-operate closely with the dietitian, in some cases to the point of having the purchasing agent and the dietitian go to market together.

On the question of new food substitutes Mr. Chapman observed that some food substitutes were good, notably certain cereal coffees and butter substitutes which were both palatable and rich in fats.

There was a great divergence of statement regarding unit food cost and only one or two delegates knew the unit of consumption a day in their institutions.

E. R. Crew, M.D., Secretary-Treasurer 1919-1920, elected treasurer.

In an effort to interest state and tuberculosis hospitals in the work of the association, the Wednesday afternoon session was devoted to papers on mental hygiene, and the tuberculosis hospitals of the state of Ohio. The former subject was presented by Dr. E. A. Baber, Superintendent Dayton State Hospital, in an illustrated lecture. The latter subject was covered by Dr. S. A. Douglass, Superintendent Ohio State Sanatorium, Mount Vernon, Ohio, in a brief paper bearing the title "The Tuberculosis Hospitals of the State." In his paper, Dr. Douglass brought out the fact that sixty-five counties in the state of Ohio have no facilities for the institutional care of tuberculosis. This shortcoming was forcibly brought home by the request of the U. S. Public Health Service for beds for the treatment of discharged tuberculous soldiers.

Dr. Douglass' paper was followed by a brief review of the organization for public health service in Ohio by Dr. A. C. Bachmeyer, who reviewed the development of public health work in the state of Ohio, beginning with the passage of the Hughes Bill and the Griswald amendment, to the present time. He called attention to the fact that,

Mr. F. E. Chapman, appointed secretary.

whereas before the passage of the Hughes Bill, there were two thousand health officers throughout the state, 70 per cent of whom were not physicians, the number under the Hughes Bill had been reduced to one hundred and sixty-eight, all of whom were physicians and knew something about public health work. Inasmuch as the State Commissioner of Health had expressed the hope that a voluntary public health organization might be formed to support the work of the State Department of Health, the Ohio Society for the Prevention of Tuberculosis had recently been reorganized and its name changed to the Ohio Public Health Association. The objects of this new association are to be:

(A) The promotion of the organization and work of local public health leagues in all parts of Ohio.

(B) The dissemination of knowledge concerning the prevention of disease with particular reference to the prevention of tuberculosis.

(C) The encouragement and support of organized and official work for the prevention of disease with particular reference to the prevention and scientific treatment of tuberculosis.

(D) The securing of proper legislation for the prevention of disease.

(E) The encouragement of adequate provisions for the prevention of disease by the establishment of hospitals, sanatoriums, clinics, dispensaries, for service of every description, and otherwise the doing of all things and acts having as their object the prevention of disease.

(F) The study of conditions regarding the prevalence

Memorial Hall, where the convention meetings were held.

of preventable disease, especially tuberculosis, in the state of Ohio.

Mr. C. F. Owsley of Youngstown, O., led a brief round table on the subject of hospital construction, devoting his time largely to Ohio's building code as it applies to hospitals.

Wednesday evening's session consisted of a banquet at the Hotel Deshler at which, in an after dinner speech, Dr. Starr Cadwallader discussed the subject of the present day program of the American Red Cross.

At the final session of the association, held Thursday morning, Rev. Charles B. Moulinier, S.J., President, Catholic Hospital Association, spoke on The Appraisal of Hospital Output, laying special emphasis on the necessity for searching scrutiny of hospital work from the standpoint of end results to determine their efficiency. Resolutions were passed approving the principle of the state licensing of hospitals, to cooperation with the high schools in the training of nurses, and approving the principle of cost payment for hospital service in industrial cases. A resolution was also passed dissolving the Ohio Hospital Association as a state organization, and creating the Ohio Section of the American Hospital Association, to be known as the Ohio Hospital Association.

The following officers were elected: President, Dr. P. W. Behrens, Superintendent Toledo Hospital, Toledo, O.; First Vice President, Dr. A. C. Bachmeyer, Superintendent Cincinnati General Hospital, Cincinnati, O.; Second Vice President, Miss Nellie I. Templeton, Superintendent Salem Hospital, Salem, O.; Treasurer, E. R. Crew, Miami Valley Hospital, Dayton, O.; Secretary, F. E. Chapman, Superintendent Mount Sinai Hospital, Cleveland, O.; Trustees: for one year, Dr. A. C. Bachmeyer, Superintendent Cincinnati General Hospital; two years, C. B. Hildreth, St. Luke's Hospital, Cleveland, Ohio.; three years, Miss Mary Subray, City Hospital, Warren, O.; four years, W. H. F. Marting, Keller Hospital, Ironton, O.; five years, Rev. M. F. Griffin, St. Elizabeth's Hospital, Youngstown, O.

The next meeting will be held in Toledo, O., May, 1921.

A STRONGER ORGANIZATION OF THE AMERICAN HOSPITALS*

By ANDREW R. WARNER, M.D., Executive Secretary, American Hospital Association

Cooperation between The American Hospital Association and the various state hospital associations for the welfare and for the best interests of the hospitals is not a new idea. Several years ago the Constitution of The American Hospital Association was so worded as to permit the development of this cooperation at any time that seemed feasible. We hope that such a time has now come.

Our nation is divided into states, each with separate laws and procedure. Any question involving legal status is either a state or a national matter. It is therefore advisable that hospitals be organized in the same way to meet best the legislative and legal status problems. Questions not affected by legislation or legal status should be handled by a grouping of hospitals as general as the questions, and practically all of such questions are national in scope. It seems logical, therefore, that the organization of the hospitals of the country should proceed along strictly state or national lines.

The work of the American Hospital Association has heretofore been confined to all practical purposes, exclusively to problems of national scope and this indeed provides a much larger field of work than has been undertaken. The problems of hospitals arising in the different states has not been given attention for two reasons: first, because these problems have not usually come to the attention of the Association until after settlement of the question within the state and then if at all, in the form of a protest; and second, because there was no effective

*Read at the Sixth Annual Meeting of the Ohio Hospital Association, Columbus, O., May 25, 1920.

The Columbus State Hospital, Columbus, O., one of the largest Kirkbride buildings ever built, accommodates 1,500 patients and employees. It is a mile and a quarter around the foundation walls.

organization within the state from which we could learn the general attitude of the hospitals of the state and the local conditions and through which we could work effectively.

Hospital Viewpoint Overlooked in Legislation

All hospitals have become painfully aware of the fact that legislation affecting the health work in a state can be enacted without consideration of the established practices, customs, organization, and procedure of hospitals and that this invariably proves very troublesome to hospitals. In addition to being troublesome, these laws often cause the hospital definite demonstrable financial loss. In most cases this was clearly not intended in drafting the law. It is chargeable to the ignorance of those who drafted the legislation in matters of hospital management, and to the indifference of hospitals to legislative action, which can make it possible for legislation seriously affecting hospital work to be introduced, given the usual publicity, passed by both houses of the state legislature and signed by the governor without the viewpoint of hospitals being voiced in any definite, concerted way, even if it is voiced at all.

Nearly every state in the union has now passed industrial insurance legislation compensating the injured for industrial accidents, and many of these laws provide, in addition to the compensation to the injured, liberal allowance to physicians and surgeons for their services to the injured; but all these laws have failed to provide adequate or even reasonable compensation to hospitals. The hospitals have been compelled under the laws to expend endowment or other income in the care of state cases, for it is practically impossible to avoid admitting them. You in Ohio have been more fortunate and have from the first fared better than the hospitals in other states. The adoption of the principle that the average cost of the service rendered is the equitable figure to be paid to hospitals for the care of state industrial cases—which is now under discussion and consideration by the Ohio Commission—will lead the other states to the same position. As there seems to be no justification for hospitals using endowment or other income in the care of state cases at compensation below cost, which divert to the state funds given for charity and, on the other hand, no justification for the state's paying profit to the hospitals, the average cost seems the proper amount of compensation.

Anyone can see plainly the present trend towards state supervision of health with the ultimate goal of adequate hospital and medical service for all, regardless of the individuals' status or circumstances. This must mean the development of many future laws of vital interest to hospitals, and hospitals must be prepared to place their side of these questions before those who shall frame such laws that this country may never again be compelled to work out the relation between the states and the hospitals after the laws are enacted. This is only one phase of the legislative probabilities.

The Children's Hospital, Columbus, O.

It is not merely a coincidence that Ohio has the oldest and strongest state hospital association in the country, and that the laws of Ohio, affecting hospitals are more considerate of the problems of hospitals and are more favorable to the development of the hospital field than any other state of this Union. In this state there has been an organization which could be consulted on state hospital questions, which could thresh them out to a common opinion and judgment, and which could present the viewpoint of the hospitals with concerted action. Such a strong state association can aid materially the work of The American Hospital Association, and there are some of us who believe that The American Hospital Association can in many ways help the state associations to be of greater service to the hospital field generally and to the hospitals of their state in particular.

A stronger organization of hospitals than we now have can be developed by the organization of active state associations in every state, in which hospitals may work with common interests under common legal status, and the

Franklin County Sanatorium for Tuberculous Patients.

combination of all those into a national organization to meet national problems. The American Hospital Association is definitely committed to this policy and will give assistance in every way possible. There are now about five active state associations and a dozen more in process of organization.

To accomplish this organization it is proposed that there shall be established a cooperation and a working affiliation between the American and the state associations whereby the state association shall preserve its autonomy in every way but shall act as the state representative or section of The American Hospital Association, receiving all aid and support which The American Hospital Association can bring to it.

Resolution Concerning State Membership

Some months ago the trustees of The American Hospital Association passed the following resolution:

"VOTED, That a state hospital association may be approved as a "geographical section" of The American Hospital Association, provided that for every member of such state association eligible to active or associate personal membership in The American Hospital Association there shall be annually collected and paid to the state associations from and by such members, membership fees not less than the corresponding fees required by The American Hospital Association, and that the state association shall pay annually to The American Hospital Association for every associate member $2.00 and for every active member $5.00; and that, upon receipt of such payments, there shall be paid and allowed by The American Hospital Association to such state association for every active member $2.00 per annum to defray the expenses of the state association, as a section of The American Hospital Association. The state association, when approved as a section of The American Hospital Association, shall furnish lists to The American Hospital Association of members for whom the amounts of $2.00 and $5.00 annually have been paid, and the members so listed shall, if eligible to corresponding membership in The American Hospital Association, be entitled to all the privileges of personal membership in The American Hospital Association, in their respective classes."

The form of this resolution is simply a working suggestion. The minutes of this meeting state that the wording of this resolution will be modified, "if on consultation with state associations, it is found that a change is desired." By this resolution the institutional membership is left direct with The American Hospital Association, but the personal membership is accomplished through and depends upon membership in the state hospital associations. It is expected that in addition to that proportion of the dues of The American Hospital Association which the state hospital associations shall retain to carry out its function as a state section of The American Hospital Association, that the state associations will continue to fix such additional dues for their membership as shall seem to them best.

In addition to the American and state associations, hospitals operated by general organizations, such as churches, have something in common with each other and something apart from the other hospitals, and this may well be of sufficient importance as to justify separate national organization along these lines. The American Association will cooperate with all these most cordially.

There are many reasons other than legislative for active state associations. The trustees of hospitals are now more generally recognizing that the management of the medical institution is technical work, and that they are the gainers from the more thorough training of their executives. This brings support to the development of additional hospital meetings. It is impossible for all the hospital executives of the country to attend the meetings of The American Hospital Association. It is impossible in a four-day meeting to discuss all the live hospital questions. The programs of The American Hospital Association are showing a distinct trend toward two lines of discussions: the first, a discussion of basic principles of universal application; and second, the discussion of practical questions in minute detail. There seems to be little middle ground. Many of the practical questions involve legal status, making a general national discussion of little value, for the reason that the various speakers work under and know only the varying legal status in the different states. The meetings are too large for the most effective discussion of practical details. All this simply expresses the need for associations in every state. At these state meetings all questions involving legal status can be intelligently discussed from a common standpoint, and forty-eight round table discussions of other practical questions at state meetings can each accomplish about as much as the one at the American meeting. Every new consideration of the question brings out additional reasons for the organization of the hospitals of this country into an American Hospital Association, and into state hospital associations working in cooperation with and as state sections of The American Hospital Association.

Inasmuch as Ohio had the first state hospital association and still has the strongest and most active of the state associations, this new plan of cooperation should be developed first with the Ohio Association. To this end we urge a thorough discussion of the question at this meeting and the development of such detailed plans as may be wise; at least the adoption of a constitution similar to one to be proposed later, which will authorize such cooperation as "shall be mutually desired," and also provide for the combination of personal memberships, that there may be developed in Ohio, as soon as possible, funds for the carrying out of such measures as "shall be mutually desired" by the association, and that the beginning of the better organization, outlined above, may be made.

OKLAHOMA STATE ASSOCIATION MEETS

The annual meeting of the Oklahoma State Hospital Association was held on May 19th, at Oklahoma City, thirty hospitals being represented. The following officers were elected for the ensuing year: President, Dr. Fred S. Clinton, Oklahoma Hospital, Tulsa, Okla.; first vice-president, Dr. J. A. Hatchett, El Reno Sanitarium, El Reno, Okla.; second vice-president, Dr. A. J. Risser, Blackwell Sanitarium, Blackwell, Okla.; executive secretary, Paul H. Fesler, Supt. University Hospital, Oklahoma City, Okla.; treasurer, Dr. J. H. White, Baptist Hospital, Muskogee, Okla.; delegate to American Hospital Association, Dr. C. L. Reeder, Tulsa Hospital, Tulsa, Okla.; Alternate, Dr. G. A. Boyle, Enid General Hospital, Enid, Okla.

ONE ON THE DOCTOR

The Red Cross doctor was examining a doughboy who had been badly wounded in both hands.

The boy surveyed his injured members ruefully.

"Do you think I'll be able to play the piano when I get well?" he asked.

"Certainly you'll be able to play the piano," said the doctor emphatically.

"That's funny," remarked the soldier, "I never could play one before."

DISPENSARIES AND OUT-PATIENT DEPARTMENTS

Conducted by MICHAEL M. DAVIS, JR.
Director, Boston Dispensary, 25 Bennet St., Boston

NEW YORK DISPENSARIES: MEDICAL ORGANIZATION*

A section of Report made by the Public Health Committee of the New York Academy of Medicine on the New York Dispensaries.

New York Has Few Pay Clinics

With the exception of the Neurological Institute, whose whole work is that of a pay clinic, New York City has had little experience with the pay clinics. Of the dispensaries studied, only one—the Brooklyn Hospital Dispensary—has adopted the pay clinic plan, and there only for the diagnosis and treatment of genito-urinary diseases. A fee of $1 is required for each visit, and the fees are divided between the physicians and the hospital—one-third to the hospital and two-thirds to the physician. At this institution the genito-urinary work of the day "free" clinic and the evening "pay" clinic is combined in one department and the same physicians who do the free work in the afternoon and the "pay" work in the evening, under a plan of rotation which suits the convenience of these physicians. Evening pay clinics operated on either a similar plan or on a salary basis have been developed very satisfactorily in the Boston Dispensary, not only for genito-urinary diseases, but also for eye, ear, nose, and throat, and general medical and surgical diseases. Several dispensaries in Chichago, Cleveland, and several other cities have established pay clinics for both diagnosis and treatment or for diagnosis only; and uniformly the reports speak favorably of their operation.

Whether or not this principle will find an application in New York City depends in a large measure upon the attitude of physicians themselves. Several years ago the management of Mt. Sinai considered the establishment of a pay clinic, but abandoned the plan because of the opposition of the medical board. Many are opposed to it on the ground that it seriously interferes with the income of private practitioners. This may be true, but the fact nevertheless remains that the pay clinics are an urgent necessity, for it is only in such clinics that patients are enabled to have at small cost the benefit of all the facilities for diagnosis and treatment which any good dispensary affords. To obtain similar service from private physicians, particularly in the so-called specialties, is well nigh impossible for the people with moderate income.

Cooperative medical work of this kind is bound to survive for its manifold advantages and because it answers a well recognized need. Whether the work is done in institutional clinics or in private clinics maintained by a cooperating group of physicians, or through the agency of social insurance, is perhaps not of great moment as far as the public is concerned. It is, however, a matter of concern in dispensary organization.

(f) The Workmen's Compensation Act in Relation to Dispensaries.—Although discussion of the merits or defects of the Workmen's Compensation Law does not fall within the scope of this report, the treatment of cases accruing from the operation of the law is important from the standpoint of medical organization and service.

There is no uniform procedure among dispensaries in dealing with patients under the compensation law. In one dispensary the hospital authorities collect a fee of $1 for each visit and, after deducting 15 per cent for the overhead expense of collecting fees, distribute the money among the dispensary physicians who were concerned in the treatment of the patients; in another dispensary, one-half of the total bill for compensation cases goes to the dispensary and one-half to the dispensary physicians; in another dispensary, all money for compensation cases goes to the dispensary; in some institutions no effort is made to differentiate compensation cases from other cases and no attempt is made to collect money for services rendered. One dispensary charges $2 for first visits and $1 for second visits, all money from first visits being retained by the dispensary, and receipts from second visits being distributed among physicians; in another instance compensation cases are referred from the dispensary to the emergency or accident ward of the hospital with which the dispensary is connected; and in still another instance the patients are advised to go to the private offices of dispensary physicians. In one dispensary physicians are permitted to collect the fees themselves—a practice which has led to much criticism. In view of the lack of uniformity of procedure, it is difficult to appraise the effect of the procedure on the medical service, other than to say that there is almost general dissatisfaction on the part of physicians with the operation of the law.

One reason for dissatisfaction with the whole system

(f) The Workmen's Compensation Act in Relation to dispensaries.
(g) Home visiting medical service.
(h) Laboratory and x-ray service.
(i) The nurse in the dispensary.
(j) The dietitian in dispensary work.

This is the third and last installment of the second chapter of a series of three chapters, taken from this report because of their special interest to dispensary and hospital executives. Chapter 1, "Organization, Administration and Equipment of Dispensaries," was published in two parts, Part I, in the February issue; Part II, in the March issue. The first and second installments of Chapter 2, "New York Dispensaries—Medical Organization" were published in the April and May issues.

is that there is great difficulty in collecting money from the corporations responsible and from the insurance companies. They are able, by clever dodging, to delay payment, and if the amount is small, the hospital or dispensary authorities prefer to ignore the non-payment rather than to spend a large amount of time and energy in trying to collect the bill. The only dispensary in the group studied which has a satisfactory plan for handling compensation cases is the New York Hospital Dispensary. There, because of the great number of compensation cases, a special compensation department was created for both hospital and dispensary, in charge of an adequate force of clerks, who are responsible for the registration of cases, preparation of bills, and collection of money. In this institution all moneys received go directly to the hospital. In lieu of allowing dispensary physicians to receive fees for the care of compensation cases, all the physicians are paid regular salaries, varying with their rank in the dispensary from $100 to $300 a year.

Salaries Instead of Fees

The plan adopted in the New York Hospital Dispensary is by far the most satisfactory observed in this study. It guarantees salaries to physicians instead of making them dependent upon fees which may or may not materialize. All physicians are placed upon the same footing and so there is no dissatisfaction among them. In dispensaries where the number of compensation cases is few, such organization as the New York Hospital Dispensary has developed is of course not needed, but certainly the principle adopted by this dispensary, in paying physicians fixed salaries out of the proceeds, regardless of the number of compensation cases cared for individually, seems to be the most satisfactory solution of the problem as far as it concerns the medical staff.

(g) Home Visiting Medical Service.—The home visiting medical service which has been maintained by several of the detached dispensaries, like the New York Dispensary, the Northern Dispensary, and one of the hospital outpatient departments, has recently been decreased in amount because of the discontinuing of it in several institutions, notably at the Good Samaritan. In the opinion of the officers of the dispensaries where the home visiting service is maintained, it is considered of great value, not only because many of their patients might otherwise be denied needed medical care, but also because it permits the dispensary to follow up certain types of patients and to see that the dispensary work done is not wasted. It was difficult to obtain exact information as to the types of conditions treated by the visiting physicians and the circumstances under which these services are offered.

Home Visiting Medical Service

As far as we were able to ascertain, at least twenty-five cities maintain a home visiting medical service. Washington, D. C., Philadelphia, Cincinnati, Pittsburgh, Utica, Rochester, and Detroit employ considerable numbers of physicians for this work. The other cities which provide a certain amount of this service through the agencies of the municipality are Chicago, San Francisco, Portland, Me., Providence, Fall River, Paterson, N. J., Schenectady, Dayton, Newark, Indianapolis, Jacksonville, Denver, Hartford, Cleveland, Columbus, Utica, Buffalo, Baltimore, and Springfield, Mass.

The doctors are on full time in Cincinnati and Cleveland, elsewhere on a part time basis. In some of the cities, like Cincinnati and Rochester, the physicians also do school medical work.

Dr. Charles V. Chapin, superintendent of health of the city of Providence, believes that the service should be under the direction of the Department of Health. He writes that, contrary to his expectations, "there is rather a small number of chronics, while acute conditions make up the bulk of the cases. Thus, in 1917 there were 17 cases of measles, 25 of diphtheria, 35 of influenza, 68 of some acute throat troubles, 13 otitis media, 77 acute bronchitis, 59 pneumonia, 125 gastro-intestinal or feeding cases, 47 peurperal, 63 minor surgery. On the other hand, there were only 28 cases of pulmonary tuberculosis, 13 of cancer, 34 of heart disease, and 15 of rheumatism. Seven hundred and two of the cases remained in the home, the rest were sent to institutions, and many of these were visited for permanent diagnosis only." Dr. Chapin considers the service very valuable from the point of view of securing an early diagnosis in acute infections. He experiences no difficulty in getting first class young men to attend to the cases for a certain period of time at the rate of 75 cents per visit. He also states in his communication that in a very few instances were the cases referred able to pay a physician and that "the practicing physicians of the city are very much in favor of this service and consider it helpful and not a hindrance in any way."

District Physicians Render Service

The Boston Dispensary has been employing district physicians since the opening of the institution in 1796. The service is considerable. During 1918 the physicians made 12,213 to 8,194 visits to individual patients, the bulk being children. The physicians are employed on a part time basis, and by the rules of the dispensary they can hold the position for not more than three years. Some of the men hold fellowships in the Harvard or the Tufts Medical Schools. The appointments are awarded to young men of good training while they are starting their practice.

No accurate information is available as to the amount and character of the work done in this direction in New York, or in most of the other municipalities.

(h) Laboratory and X-ray Service.—Of the dispensaries included in this study, only three have complete, well equipped pathological laboratories for dispensary work separate from their respective hospitals. These are the Mt. Sinai Hospital Dispensary, Lebanon Hospital Dispensary, and the Polhemus Clinic (Long Island College Hospital Dispensary). In all other hospital dispensaries the major part of the pathological work is done in the hospital laboratory. Bellevue Hospital Dispensary has, however, small laboratories connected with the dispensary where routine work is done in the examination of urine, pus, smears, and the like, particularly in connection with the children's clinic and the gynecology clinic; at Gouverneur Hospital Dispensary a small laboratory is provided in connection with the medical clinic; at the New York Dispensary, the St. Luke's Hospital Dispensary, and the Brooklyn Hospital Dispensary special laboratories are provided for routine laboratory work in connection with the genito-urinary clinics.

Of the six dispensaries not connected with hospitals, Vanderbilt Clinic has a well equipped laboratory for general dispensary purposes, and a special laboratory for the genito-urinary and skin clinic; Cornell Dispensary utilizes the college pathological laboratory and has no special dispensary laboratory service; at the New York Dispensary the pathological laboratory provided in the dispensary is not used, all pathological specimens being sent to a private laboratory; at the Demilt Dispensary there is no adequate laboratory, and with the exception of occa-

sional urinalysis, or examination of smear, no laboratory work is done; at the Brooklyn City Dispensary the pharmacist makes an occasional test of urine, but no laboratory is provided.

Utilize Hospital X-Ray Service

In the dispensaries studied, twenty utilize the hospital x-ray service, and in two of these, namely, Mt. Sinai Hospital Dispensary and the Polhemus Clinic (Long Island College Hospital Dispensary), special x-ray equipment is provided in the dispensary for treatment only. Of the remaining five hospital dispensaries, Sloan Maternity Hospital Dispensary and the Knapp Eye Clinic refer patients to Vanderbilt Clinic for x-ray examinations, which utilizes the equipment of the Roosevelt Hospital for the purpose. The Nursery and Child's Hospital Dispensary likewise obtains x-ray service through the Roosevelt Hospital; the Babies' Hospital Dispensary and the Manhattan Clinic have no x-ray facilities.

Cornell Dispensary has an excellent x-ray equipment, utilized both for dispensary work and for instruction of students; the Clinic for Functional Reeducation made arrangements for the utilization of the x-ray equipment of the New York Infirmary for women and children, located in an adjoining building; New York Dispensary, Demilt Dispensary, Brooklyn City Dispensary, and the Speech Defect Clinic have no x-ray equipment.

The study of the medical work of the several institutions presented in another section of the report indicates the amount and character of laboratory work done in dispensaries in connection with the diagnosis and treatment of disease. Here it may be sufficient to state that on the whole this adjunct to medical practice is neglected in dispensary work.

(i) The Nurse in the Dispensary.—Aside from the tuberculosis, pediatric, and gynecological clinics, which almost invariably have nurses attached to their work, the dispensaries are not adequately supplied with nursing assistance. In the dispensaries not connected with hospitals having a training school the force of nurses is particularly low. In the out-patient departments of hospitals maintaining training schools, it is the practice to utilize pupil nurses, under supervision, for routine dispensary work, but even in such dispensaries the program of rotating pupil nurses through the dispensary is contingent largely upon the exigencies of hospital service, and has not been made an essential feature of the training school curriculum, except in one or two dispensaries. In fact, in the majority of hospital dispensaries, pupil nurses are assigned to dispensary work more or less informally and without definite purpose except to meet an emergency.

Of the thirty-two dispensaries included in the survey of administrative organization, nine are not affiliated with training schools for nurses—and of the nine three are operating in such a limited field that such affiliation would be unnecessary. But in the remaining six, affiliation with a nurses' training school would be a decided asset.

Duties of Dispensary Nurse

The usual practice in hospital dispensaries is for a supervising nurse of the hospital to be designated as head nurse of the dispensary. This arrangement is quite satisfactory so long as hospital duties do not conflict with dispensary duties. But it is highly essential that whoever is designated as head nurse of the dispensary shall be able to give an adequate amount of time to dispensary work which does not begin with the opening of clinics and does not end with their close. In fact, in a large dispensary with a large number of special clinics, practically the entire time of a head nurse is required. It is her duty to see that the dispensary quarters are clean, in good order, that supplies and equipment are prepared and at hand, that discipline and order is preserved, that the nursing needs of clinics are adequately met, that at the close of clinic work, equipment is properly taken care of, clinic rooms put again in order, and that the dispensary is thoroughly cleaned and made wholesome.

In small dispensaries, the head nurse may perform a variety of additional functions, depending upon the needs of service. She may be, as in the Brooklyn City Dispensary, the sole person responsible for clinic supervision, registering of patients, routine nursing work, and even visiting social service work after clinic hours. But this dispensary is an exception to the rule, because of its limited service and clientele.

With the present lack of a definite organization plan in dispensaries, the nurse is called upon to do the work of a nurse, a clerk, messenger, and general assistant to the physician. Such an arrangement may perhaps help in expediting the despatch of clinic business, but it is not economical and, moreover, if the nurses be pupil nurses, who are especially assigned to acquire training and experience in dispensary work, such a method, or lack of method, rather, defeats the purpose. A properly arranged plan can be of real service to the medical efficiency of a clinic and can at the same time afford to the nurse the training which she can only obtain in the dispensary, namely, a better understanding of the health and social needs of the community. Her duties should therefore be clearly defined and supervised.

As has already been stated, the ideal general dispensary is one which is affiliated with a teaching hospital, and the ideal dispensary nursing service is one which is affiliated with the training school of a hospital. In order to give the pupil nurse or other nurse as broad experience as possible, it is desirable that she have experience in as many departments of the dispensary as possible. It is not, perhaps, necessary that the nurse pass through all clinics, but whether she be a pupil nurse or not, she should have experience in those clinics which will give her the broader understanding of the community problem. She should, however, have experience in a general medical clinic, in a general surgical clinic, in a pediatric clinic, a genito-urinary disease clinic, and a clinic for diseases of women. If parental or dietetic service is provided by the dispensary, she should receive experience there. To round out her training she should have experience in the social service department.

So far as possible, the nurse's duties should be confined to nursing, that is, the preparation of the patient for examination and assisting the physician. If there be no clinic secretary, it may be necessary for her, in certain clinics, to assist the physician in taking and recording histories and in making appointments with patients and establishing their contact with other departments of the dispensary when necessary.

In the Social Service Department, in which all nurses, pupil or graduate, should have experience and training, her duties should include not only the interviewing of patients in the dispensary, but also the home visiting of patients.

(j) The Dietitian in Dispensary Work.—A recent development of dispensary service is the employment of a dietitian for the instruction of patients in the preparation of food. The service of such dietitians are extremely valuable not only in supplementing the medical advice and treatment, but also in aiding the Social Service Department to adjust family income to family expenditure. As

yet, none of the dispensaries included in this study have developed such service. This service has been provided and has been found well worth while in the out-patient department of the Massachusetts General Hospital, in the Michael Reese Hospital Dispensary, and in the Boston Dispensary. At the Massachusetts General Hospital, in addition to the educational work which the dietitian does in the dispensary, she is responsible for the preparation of lunches for patients. A lunch counter is provided and patients receive practical demonstrations in food values and at the same time obtain nourishing food at cost.

It is believed that large dispensaries, particularly those connected with hospital service, would find it practical as well as profitable to employ a dietitian for dispensary work, under the general supervision, perhaps, of the hospital dietitian, but particularly responsible for dispensary work. It is believed, too, that it would be decidedly worth while in large dispensaries, whose hours make it impossible for patients to obtain lunch without loss of places in the waiting room, to provide lunches for patients at cost.

The description of the work of the "Food Clinic" of the Boston Dispensary, as given in the annual report of the institution for 1918, will be of interest in this connection.* The clinic is of recognized educational value to the patients, and the Massachusetts Committee on Public Safety appropriated funds for a poster, fifteen feet long, painted in colors, to be put up in the clinic, outlining the chief functions of the several types of food. The patients are given booklets in which they put down in the proper rubrics the things they had each day for breakfast, dinner, and supper, and extras, and the books are presented to the dietitian upon the return of the patient to the clinic. The following is the description of the aims, functions, and work of the "Food Clinic."

"The war caused more or less change in the food habits of a number of persons in comfortable circumstances. It created a serious food problem for ever so many persons of small means. To assist in the effort to comply with the requests of the Food Administration, and in adjusting family budgets to the higher levels of prices, the Food Clinic was started in July, 1918. The health of the worker depends largely on his food. The food of the children largely governs their growth and stamina. There is the under-nourished child, whose mother is able to buy enough food for him but does not know how to cook and prepare it; there is the diabetic, whose dietary habits can only be adjusted to meet the demands of the physician through a careful process of education. Besides these and other special medical problems, there are a host of other families where the health of all members depends upon the most economical use of every cent of a small family income. For all types, such an advisory clinic as we have established at the Boston Dispensary is proving of the greatest value. Mothers are brought to the dietitan by the doctors and social workers; children are shepherded to her in little groups; with the aid of charts, account books, the gas stove, the double boiler, and other utensils and food samples with which the clinic is equipped, practical instruction is given in purchasing, preparing, and serving food. Classes of children are selected by the physicians as particularly needing better nutrition, and are taught with a view not only of interesting the children themselves in their own growth, but as a practical means of 'getting over' education into the home itself. The Food Clinic has brought forth a most gratifying response from the physicians and social workers of the dispensary, and from organizations outside.

"It has already been made a teaching center, students from Simmons College and from the Garland School of Homemaking being assigned to the work of the clinic as part of their course of instruction. The cooperation of the Dietetic Bureau of the League for Preventive Work has been of much assistance."

*An article on the work of the Boston Dispensary entitled "Food Clinic of Boston Dispensary Meets Everyday Need," by Bertha Wood, Dietitian, Boston Dispensary, appeared in the January issue of THE MODERN HOSPITAL.

CHILD WELFARE BUREAU IN BELGIUM

A national children's bureau has been recently established in Belgium the functions of which are to "encourage and develop the protection of childhood, and especially to further education with regard to rules of child hygiene and to assist in their application, whether in families or in public child-caring institutions; to promote the organization of agencies interested in child hygiene, and to assist them by subsidies or otherwise; to assure supervision by the administrative authorities and physicians over the agencies thus protected."

A board of forty members has the decision on all questions of child protection, functions of the subsidized agencies, and disposal of funds. Provincial committees are to be established in each province to aid the bureau in its work. In addition, local committees are to see that school meals are distributed and special food provided for anemic children. The cost of the school lunches will be met one-half by the State, one-fourth by the community, and one-fourth by the province. The infant consultation centers must, among other duties, provide for free physical examination of all children under the age of three in families under the care of the centers; for organization of free medical consultation for expectant mothers; and organization of educational work to emphasize the value of infant hygiene and breast feeding.

GERMAN NURSING PROGRAM

It appears from German nursing papers that the nursing world in that country is busy setting its house in order. The German Union of Nurses has been considering reorganization, and urges the establishment by the State of training schools for nurses. It considers that it should not be left, as hitherto, for isolated hospital boards to give a more or less efficient training, but that regulations as to training should be laid down by the State for both lay and religious nurses. The Union demands a proper curriculum with hospital experience, a sound school education for probationers, good moral character and health, a three years' course with an examination at the end, an employment bureau attached to each training school, and compulsory post-graduate courses every two or three years, in order to keep the nurses up-to-date. It suggests that training schools be established in all large hospitals with at least 300 beds, and that smaller hospitals should affiliate for the purpose of training; that, in addition to ward work, lectures should be given from three to five and from eight to nine every day except Saturday and Sunday, and that in her third year the probationer should be given responsibility in the ward. It is pointed out that since 1751 midwives have had a proper training and compulsory post-graduate courses, and that nursing is far behind in this respect with its present one-year training.—Nursing Times.

NURSE-TRAINING IN FRENCH HOSPITALS

A bill is to be brought forward in the Chamber of Deputies for the reorganization of hospitals in France. It is freely acknowledged that in matters of health and nursing France is far behind other countries, and the hospitals, even in the large towns, have not the equipment demanded by the doctors. The bill is said to have the support of most of the members of the medical profession in the country. Should the bill become law one of the immediate results should be an increase of training schools for nurses in France, which at present are negligible, with the exception of Paris and Bordeaux.—The Nursing Mirror.

DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by LULU GRAVES,
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ABRIDGED DIETARY CALCULATIONS FOR RATIONS IN QUANTITY

By ANTON R. ROSE, M.S., Ph.D., Laboratory of Pathological Chemistry, New York Post Graduate Medical School and Hospital, N. Y. C.

Expert control is more and more in vogue wherever materials of any kind are used in quantity. In large plants chemists are employed to give definite information as to real values of the materials used; even the coal for the boilers is analyzed. Similarly, there is an increasing demand for more definite information as to foods issued for consumption, especially in institutions. This is not only true as to quality supplied by contractors (as per specifications), but also as to quantitative nutritive values and proper selection for the maintenance of health and effectiveness in human endeavor.

In nutrition laboratories where there is necessity for very rigid control, the food material used is sampled, submitted to chemical analysis, and from the laboratory findings the energy values calculated. Such procedure is very expensive and time-consuming. But we have at hand in our chemical literature an enormous mass of data as to the composition of foods and this information is made conveniently available by tables.* By means of these tables the practical nutritionist can get a very close approximation of the fuel value of a dietary or any known lot of assorted foods, provided he is furnished with reliable weights of the materials. These calculations, while relatively simple, are disconcertingly laborious. Having much of this sort of labor to perform the writer sought a more rapid method of calculation. From a chance suggestion in a letter from another Nutrition Officer in the Army, a scheme was evolved which the writer used in criticising army dietaries. Afterwards this suggestion was traced to a paper by Miss Caroline Hunt,** and the two schemes are alike in respect to the use of factors for calculating total calories from weight in pounds and corrections of weight to bring foods to a basis of weight equivalence with respect to total calories. Miss Hunt claims that her method will give results within ten per cent of the ordinary calculations, and she is fully justified in her claim, as is shown by a comparison of methods in Table VII.

In the author's scheme, foods are grouped with a view to a critical study of the proportions of different dietary essentials in the ration. All foods are divided into seven classes based on similarity in composition and nutritional function, and these classes are further divided into groups on a basis of likeness in chemical composition. There are thirty-three such groups.***

For each class there is a set of type factors for (1) total calories, (2) protein calories, (3) fat calories. The total weight of the foods in each class, multiplied by each of these factors, gives the respective totals for each class. These factors have been calculated, by methods to be detailed later, from averages of analyses which in the writer's opinion are most trustworthy,**** and are given in tabular form below:

Table I
Type Class Factors

CLASS		TOTAL CALORIES	PROTEIN CALORIES	FAT CALORIES
I	Cereals and Cereal Products....	1620	210	40
II	Dry Legumes and Shelled Nuts	1580	400	70
III	Vegetables and Fruits.....	300	30	...
IV	Exclusively Carbohydrate Food	1800	...	...
V	Exclusively Fat Food.....	3500	...	3500
VI	Foods Rich in Fat and Protein.	315	60	160
VII	Animal Foods not Included in V and VI	600	300	350

Correctional Factors to Render Weights of Groups Equivalent to One Another

The combined weights of each group within a class are multiplied by correctional factors, so as to make them conform in composition to the type, as will be explained later. These numbers consist of one digit, and, at most, one decimal (except where the fraction is in thirds or fourths), and the multiplication in the majority of cases is very easily done by inspection. When these correctional group factors have been used the type class factors are applied to the sum of the corrected group weights in each class.

Procedure in Application of Method

The procedure which the writer uses in practice may be briefly outlined as follows:

List all foods in the order of the classification in Table II.
Enter after the name of each food its weight in pounds.
Add the weights of the foods in each group.
Multiply the sums of the weights within each group by the appropriate "correctional factors" as given in Table II, and enter these corrected weights in the columns of "equivalent weights," for Total Calories, Protein Calories, and Fat Calories.
Add the "equivalent weights" of each column within each class.
Multiply each sum of these "equivalent weights" by its respective "type class factor."
Add the products of these multiplications for each column and note the three sums as Total Calories, Protein Calories, and Fat Calories.
Divide the Total Calories by the number of rations included in the period considered to give the Calories per Man per Day.
Divide the Protein Calories first by the number of rations, and then by four, to give the Grams Protein per Man per Day.
Obtain the percent of Protein Calories and Fat Calories in the Total Calories, subtract their sum from 100 to give the Carbohydrate Calories for the Ration Balance as, Protein : Fat : Carbohydrate :: _____ : _____ : _____.
Obtain the percentage distribution of the Total Calories among the seven classes for the Ration Balance as to the adequacy of nutritional essentials.

*Rose, M. S.: Laboratory Hand-Book for Dietetics, Macmillan Co. Sherman, H. C.: Food Products, Macmillan Co.
**Hunt, C.: Journal Home Economics, 10, 212-8, 1918.
***See Tables I and II.
****The data on composition were taken chiefly from the Laboratory Hand-Book for Dietetics and Food Products, and from the U. S. Dept. Agr. Bull. 28. A large number of Journal articles and Exp. Sta. Bulletins were consulted. Where an analysis diverged excessively from the mean, it was excluded.

Table II

Correctional Factors to Render Weights of Groups Equivalent to One Another

CLASS GROUP	TOTAL CALORIES	PROTEIN CALORIES	FAT CALORIES
I. Cereal and Cereal Products			
1 Wheat and wheat products	1.0	1.0	1.0
2 Rice, rye-meal and flours	1.0	0.7	0.3
3 Corn, meal and flour, corn flakes, post toasties, and similar ready-to-serve patented products, hominy, barley and buckwheat	1.0	0.7	1.4
4 Oatmeal	1.1	1.4	7.0
5 Bread	0.7	0.8	1.5
6 Bakery products:—			
a Crackers, toasted breads	1.1	0.9	8.0
b Home-made cookies and fried bakeries	2.0	0.6	20.0
c Cookies and cakes	1.0	0.6	11.0
II. Dry Legumes and Shelled Nuts			
7 a Beans, peas and lentils	1.0	1.0(1)	1.0(2)
b Baked beans	0.33	0.33	1.33
8 Shelled nuts (3)	1.7	0.9	30.0
III. Vegetables and Fruits			
9 a White potatoes	1.0	1.0	...
b Sweet potatoes	1.5	1.0	...
10 Roots	0.5	0.6	...
11 Stem and leaf types, incl. onion and mushroom	0.4	0.6	...
12 Green vegetables in pod and seed (4)	0.8	1.5	...
13 Fruit served as vegetable (e. g. squash)	0.3	0.6	...
14 Sweet fruits—a Fresh fruits	0.8	0.5	1.0
b Canned fruits	1.3	0.5	0.7
c Dried fruits	4.4	2.2	0.5
IV. Carbohydrates			
15 Sugar, candy, starch, etc.	1.0	...	...
16 Syrups, jellies, jams, preserves, etc.	0.75	...	...
V. Fats			
17 Lard, suet, vegetable oils, butter, very fat bacon and pork	1.0	...	...
18 a Less fat bacon and pork	0.7	...	...
b Separator cream and salad dressings, etc.	0.5	...	...
VI. Foods Rich in Fat and Protein			
19 Milk—fresh, whole cow's	1.0	1.0	1.0
20 Milk—evaporated	2.0	2.0	2.0
21 Milk—desiccated, cocoa, and chocolate	7.5	6.5	7.5
22 a Condensed milk	2.3	3.0	2.4
b Condensed milk—sweetened	4.7	2.6	2.1
c Gravity cream	2.7	0.7	4.5
d Ice cream	1.6	1.0	0.5
VII. Animal Products Exclusive of Whole Milk and Fats			
23 Beef, veal, liver, pigs' feet, tripe, etc.	1.0	1.0	1.0
24 Ham, pork, lean salt pork, pork, beef sausage	2.2	1.3	2.8
25 Mutton, lamb, corn beef, beef sausage	2.0	1.3	2.2
26 Sausages of fatter types than those above, fat pork and ham, bacon too lean for Class V, deviled ham, head cheese	3.0	1.3	4.0
27 Fowl (5)	1.0	1.0	1.0
27 Fresh fish, entrails removed	0.5	0.7	0.3
29 Preserved fish	1.0	1.4	1.1
30 Shell fish	0.3	0 3	0.0
31 Eggs (6)	1.0	0.6	1.0
32 Cheese	3.0	1.7	3.0
33a Milk—skimmed	0.3	0.25	0.0
b Milk—skimmed—desiccated	2.6	2.0	0.3

(1) For large amounts of kidney beans, use 1.8 for protein.
(2) For soy beans, use 6.0 for fat.
(3) Nuts are almost negligible in ordinary diets; usually deducting half the "as purchased" weight for shell will be sufficiently accurate. For chestnuts use the factors 1.1, 0.4, 4.0, in place of those given in the table if they are stored; if fresh, only half these factors.
(4) Including canned goods, e. g., peas, corn, etc.
(5) If broilers, use only half the value of these factors.
(6) If desiccated use eight times these factors.

For convenience in carrying out this procedure a form is used on which the food items are listed with places for equivalent weights and their sums within each class to be multiplied by the "type factors," also other notations convenient in the evaluation of a ration as applied to group feeding. This form is shown as Table III. (Page 489.)

Abridged Form of the Method

The underlying principle of this method may be used in the construction of any number of systems for food evaluation, the accuracy depending upon the judgment used in selecting the factors. With proper care in guarding against the influence of unusual items, the scheme, as outlined, is as accurate as the ordinary method of calculating the calories from the average percentage composition, as given in standard tables.

A condensed form of the same scheme affords a more rapid and yet a sufficiently accurate means of calculation for most problems. The directions for this abridged form are presented as Table IV.

Table IV

Abridged Form of the Method for Estimating the Calorific Values of Food in Quantity

Class I.—
a Sum of the weights of groups 1 to 4 and 6.
b Sum of the weights of group 5x0.75.
For total calories multiply the sums of *a* and *b* by 1620.
For protein calories multiply the sums of *a* and *b* by 200.
For fat calories multiply the sum *a* by 40 and *b* by 80.

Class II.—
a Sum of the weights of group 7.
b Sum of the weights of group 8x1.75.
For total calories multiply the weights of *a* and *b* by 1580.
For protein calories multiply the weights of *a* and *b* by 400.
For fat calories multiply the sum *a* by 80 and *b* by 2400.
(If there are many chestnuts present calculate these separately. If there are canned baked beans present add one-third their weight to *a* before multiplying for fat calories.)

Class III.—
a Sum of the weights of groups 9 and 14b..... 300
b Sum of the weights of groups 10, 11 and 13..... 130
c Sum of the weights of groups 12 and 14a..... 240
d Sum of the weight of group 14c.....1250
Multiply the sums of each, *a*, *b*, *c*, and *d*, by the numbers listed opposite each and add the products for total calories. For protein calories take one-tenth this value. The fat is negligible.

Class IV.—
The sum of the weights of group 15 plus three-fourths of the weights of group 16 multiplied by 1800 gives the total calories. Protein and fat negligible.

Class V.—
The sum of the weights of group 17 plus three-fourths of the weight of group 18 multiplied by 3500 gives total and fat calories. The protein calories are negligible. If separator cream is used add one-half its weight to group 17.

Class VI.—
a Sum of the weights of groups 19 and 33a.*
b Two times the sum of the weights of groups 20 and 22a.
c Seven times the weights of group 21.
(If groups 22c and 22a are present, calculate these separately.)
For total calories multiply the sums of *a*, *b*, and *c* by 315.
For protein calories multiply the same by 60.
For fat calories multiply the same by 160, excluding 33a.

Class VII.—
Add the weights of all the groups in this class, excluding fluid skim milk, and multiply by 900 for total calories, by 300 for protein calories, and by 400 for fat calories.

See Table II for classification. In this abridged form, skim milk is treated under class VI.

Practical Illustrations

A practical problem worked out in detail is given below by way of illustration. This is an army ration, the foods of which were weighed under the writer's general supervision and calculated to a basis of 800 men for ten days, or 8,000 rations. (They were taken from eight several messes.) The foods with weights for each are listed as Table V. The calculations of the first class from this dietary are given in detail in Table VI, both by the full and abridged forms of the method, as well as by the ordinary method of calculating each food separately from its recorded chemical composition.

Having made a representative list of over two hundred common food materials (which more than covers the variety of an ordinary dietary), and arranged these by classes, as already indicated, there was obtained for each

food in the class, by suitable weighting, factors for protein, fat, and total calories. The weighting was based on frequency of occurrence of the food in the ordinary diet and was applied to average analyses in which extremes of variations were excluded. Food materials were estimated "as purchased," the most convenient and generally the most reliable method for getting weights of food in quantity. The usual factors for fuel value, four calories per gram for protein and carbohydrate and nine calories for fats, were employed.

After factors had been obtained for each food material, so that by simple multiplication of any given weight of the food by these, total calories, protein calories, and fat calories could be correctly obtained, it was possible to foods in the army messes, and calculating the number of calories supplied by the maximum and minimum per cent of carbohydrate, we get the following figures:

	Pounds	Per Cent Carbohydrate	Calories Minimum	Maximum
Wheat flour	1633	73 -75.6	2,162,928	2,239,964
Farina	230	74.6-78.5	311,820	327,599
Rice	833	75.6-81.9	1,139,592	1,101,809
Corn meal	283	71.9-75.4	369,188	387,160
Oat meal	321	63.8-70.2	371,590	408,858
			4,355,118	4,465,390

We have in the carbohydrates of these four groups more than twelve per cent of the total available energy supplied by the 8,000 ration list, and they differ by 110,272 calories or 2.5 per cent. These maximum and minimum figures are

Table III—Form for Calculation and Record

ORGANIZATION _____ Number of rations 1705 Date _____

Class	Group	ITEMS	POUNDS	EQUIVALENT WEIGHT(1) TOTAL	PROT.	FAT
I	1	Wheat flour	833.5			
		Cream of wheat	91.7	924	924	924
	2	Rice	28.6	29	29	9
	3	Corn meal	64.0			
		Hominy	22.7			
		Corn flakes	12.0	99	69	139
	4	Oatmeal	111.2	122	156	778
	5	Rolls	80.0	56	64	208
II	7	Navy beans	62.5			
		Peas	24.0	87	87	87
		Etc	etc.	etc.	etc.	etc.

CLASS	WEIGHT	TYPE FACTOR	CALORIES
TOTAL CALORIES			
I	1230	1620	2,092,600
II	87	1580	137,460
III	2062	300	618,600
IV	244	1800	439,200
V	107	3500	374,500
VI	792	315	249,480
VII	1953	600	1,171,800
			5,083,640
Protein Calories			
I	1233	210	258,930
II	87	400	34,800
III	1985	30	58,550
VI	736	60	44,160
VII	1747	300	524,100
			920,540
Fat Calories			
I	2058	40	82,320
II	87	70	6,090
V	107	3500	374,500
VI	740	160	120,400
VII	1848	350	647,700
			1,231,010

Calories per man per day (2) 2,990
Protein, grams per man per day (3) 135
Ration Balance: (4)
(a) Prot: Fat: Carb: 16: 24: 60
(b) Calorie distribution—

I	41	IV	9
II	2	V	8
III	12	VI	5
(1119)	7	VII	23

Number commodities used 33
Number full portions in ten day period:

Potatoes	_____	Roots	_____
Stem-leaf	_____	Fruit	_____
Fresh fruit	_____	Meats	_____

Percent protein from meat (5) 54.7
Adequacy of ration as to:

Fuel	_____	Vitamins	_____
Ash	_____	Fiber	_____
Fruit acids	_____		

REMARKS:

(1) Sum of weights of groups multiplied by factors from Table II.
(2) Divide the sum of total calories by the number of rations.
(3) Divide the sum of protein calories by the number of rations and then divide by 4.
(4) (a) Per cent the carbohydrate calories derived by difference. (b) Per cents of total calories in each class.
(5) Groups 23 to 29, inclusive.

further shorten the operations by selecting a simple set of factors for all the foods within a group, and then choosing one set of group factors as "type class factors." A list of these "type class factors" is given in Table I. To make all the groups conform to the "type class factor," a system of "correctional factors" is introduced. These correctional factors have been obtained by dividing the factors of each group by the "type factor" of its respective class. In practice the combined weights of the foods in a group are first multiplied by "correctional group factors." The "correctional group factors" are given in Table II.

As a criterion of the permissible limits of error we may take the first four groups. Using the weights of the rational (extremes being excluded) and the foods used may fall at any point in this range, if analyzed. The natural products of classes IV and V would give smaller difference, but all the other classes would give a very much larger range. It is on the basis of this wide range in reported chemical analyses that the statement was made above that the scheme, as outlined, is as accurate as the more lengthy procedure of calculating from the percentage composition of each individual food stuff. To be more accurate the assistance of a laboratory must be called in. Because of the high probability of compensation in errors, the method becomes as accurate as the majority of cases will require, and is within three or four per cent of the abso-

Table V

Foods of the Problem Listed as Required by the Method

Class	Group		Pounds	Class	Group		Pounds	Class	Group		Pounds
I	1	Flour	1633	III		Spinach	110	IV	15	Sugar	1856
		Farina	229			Celery	30			Starch	83
		Shredded wheat	102			Lettuce	43			Tapioca	16
		Puffed wheat	4		12	String beans	267		16	Syrup	977
		Macaroni	122			Peas	390			Jelly	11
	2	Rice	833			Corn	320			Jam	141
	3	Corn meal	283		13	Tomatoes	181			Apple butter	114
		Corn flakes	89			Tomatoes, canned	838	V	17	Lard	642
		Corn hominy	9			Pumpkin	270			Olive oil	3
		Post toasties	124			Peppers	33			Oleo	160
		Grape nuts	8		14a	Apples	1149			Butter	390
	4	Oatmeal	321			Cranberries	18			Bacon	266
	5	Bread	4353			Bananas	223		18	Salad dressing	3
	6a	Crackers	71			Oranges	97	VI	20	Milk	1693
	c	Cookies	12			Lemons	102		21	Cocoa	68
II	7	Beans	255			Grape fruit	70			Chocolate	17
		Beans, lima	50		b	Peaches	398		22d	Ice cream	201
	8	Cocoanut	9			Apricots	125	VII	23	Beef	2394
III	9a	Potatoes	6370			Cherries	31			Veal	425
	b	Potatoes, sweet	124			Pears	85			Liver	232
	10	Carrots	145			Pineapple	250		24	Ham	1247
		Beets	47		c	Apples	318			Pork	215
		Turnips	52			Apricots	39			Sausage	147
	11	Cabbage	361			Blackberries	39		25	Sausage	113
		Cabbage kraut	94			Peaches	18		26	Sausage	61
		Onion	238			Prunes	119		28	Fish	121
						Raisins	43		31	Eggs	558
									32	Cheese	79

lute value whenever the list of foods is that of a common dietary.

As the arithmetic is abridged there must be increased care to avoid the vitiating influence of large proportions of unusual foods. The above scheme could be placed in the hands of an office clerk without training in nutrition, as a routine proposition. The factors used in the arithmetic are chosen to compensate errors on the basis of the usual American dietary habits, and if large proportions of materials are introduced which are at variance with our table experience, as for instance, more crackers than bread or more salad dressing than butter, such exceptional quantities should be lifted out of the scheme, each one calculated separately, and added each to its proper class. Also it is sometimes expedient to resolve prepared foods into their component parts, and distribute the weights of these among the groups where they properly belong.

There are many staple dishes which it is often convenient to include directly in such a scheme, rather than to make estimates of the raw materials which they contain, as for example, ice cream, and bakery goods. Bread and crackers are well standardized and have been regularly included (as groups 5 and 6b). Cookies and cakes (groups 6b and 6c) are represented by a very large number of analyses and by the exclusion of only about half a dozen of these have been brought to within seven per cent of the mean analyses, so that we are justified in including them in the scheme. In regard to pies, which vary tremendously, the writer has assumed that the crust comes within the range of cookies, and that the amount of filling in a serving is equivalent to three-fourths of the same when served as a fruit or pudding.

At the present time, it is impossible to fix a standard for canned goods. If the groups 12, 13, and 14 should yield as much as a tenth of the calories this sort of evaluation would be inaccurate, but they probably never yield more than five per cent in practical dietetics. By no reasonable selection can the canned goods be crowded within a range of ten per cent of the mean, and no selection was therefore made, but an average struck on all analyses that came to the notice of the writer. In some vegetables the different brands vary over fifty per cent, often due to a variation of from ten to thirty per cent in the liquid. The fruits have different amounts of added sugar.

The fats as calculated by this scheme, are lower than the calculations made directly on individual analysis, but compared with their probable consumption they are still considered rather high. Much of this fat is removed in food preparation, more at the table, and the fat used in frying is subject to large waste.

The problem chosen to illustrate this method in this article has also been calculated in the usual way from the percentage composition as given in our best tables, also by the quick method proposed by Miss Hunt. The results of these various methods are given in Table VII. It will be noted that the results come within the range of variations noted for the carbohydrates in the first four groups. The agreement between the individual classes is not as good as the totals, which signifies but little since the probability of compensation of error is very high, and the agreement of the percentage distribution of the calories in the classes (which is a feature of the method), is excellent. The protein figures are sufficiently close to give the "balance of ration," and the grams per man per day, which are the only objects of calculating them. The fat figures are a secondary consideration and come within reasonable range for striking the ration balance.

The calculations of food allowance by the foregoing method, tells us, first of all, the total energy value of the materials considered, which, divided by the number of rations, gives us the total calories per day for each person. The protein calories from these same materials, divided by the number of rations and then by four, gives us the grams of protein available per man per day. The fat calories also being determined, it becomes a simple matter to get the "balance of the ration," which is percentage distribution of the calories as to protein, fat, and carbohydrate, the last being arrived at by subtraction. Before the more recent work in nutrition had come so prominently to the front these were the sole considerations in dietary criticisms. For dietary standards the reader is referred to approved text books on the subject.*

By the method under discussion, we can introduce a second "balance of ration," a percentage of distribution of the calories among classes of foods as shown in Table VII, and have a simple method of judging the adequacy of the dietary in regard to the essentials not included in the foregoing paragraph. It is now considered important to have the protein from various sources so that the

different kinds of these will adequately supplement one another. Information on this point is concretely presented by this method. The adequacy of calcium is determined largely by the percentage of milk calories (Class VI), that of iron and ash generally by fruits and vegetables (Class III). The quantities in Classes III and VI also indicate the probable sufficiency of the vitamines.

	Army Mess	Workhouse**
I Cereals and breadstuffs	35.2	45.5
II Beans and peas	1.5	6.5
III Vegetables and fruits	12.2	11.9
(9a Potatoes)	(5.5)	(7.0)
IV Sugars, syrups, etc.	16.2	5.0
V Fats	15.9	6.3
VI Milk and cocoa	14.7	2.5
VII Meats	4.3	20.0

There are other practical considerations which determine amounts of different food groups in the dietary, such as variety, laxative properties, and general adaptation to the particular group of people for whom the ration is provided. (The percentage distribution of the calories in two dietaries is shown below:)

In inspecting such a summary as the above, we should have in mind: that the emphasis of Classes I and II tends to economy; that of Classes V and VII to high cost; slighting Class VI means a probable deficiency in calcium; in slighting Class III there will be danger of not supplying enough iron; Classes III and VI should both be relied on to insure adequate vitamines. An excess of Class IV depresses the consumption of foods which, though of lower calorific value, are absolutely necessary for their ash elements and vitamines. From study of diets which have

Table VI

A Comparison of the Volume of Work Involved in Computing the Calorific Values of Foods by the Three Methods, Using the First Class Food Materials Listed in Table V

A. USUAL METHOD OF CALCULATING INDIVIDUAL ITEMS

Group and Food Materials	Food Weight Pounds	TOTAL		PROTEIN		FAT	
		Factor	Calories	Factor	Calories	Factor	Calories
1 Wheat flour	1633	1620	2617700	203	331500	41	66953
Cream of wheat	229	1641	375870	200	45800	48	10992
Puffed wheat	4	1656	6624	220	880	44	176
Shredded wheat	102	1628	166056	220	22440	74	7548
Macaroni	122	1626	198372	227	27694	41	5002
Total pounds in group 1	2090						
2 Rice	833	1580	1324470	146	121615	13	10829
3 Corn meal	283	1630	461290	167	47261	78	22074
Corn flakes	89	1631	145159	101	8989	54	4806
Corn hominy	9	1609	14474	151	1359	25	225
Post toasties	124	1637	202988	92	11409	81	10044
Grape nuts	8	1765	14120	248	1984	205	1640
Total pounds in group 3	513						
4 Oatmeal	321	1803	578763	303	97363	298	95658
5 Bread	4353	1184	1151395	170	740010	53	230709
6a Crackers	71	1863	132202	187	13277	358	25418
b Cookies	12	1527	18324	128	1536	395	4740
CALORIES IN CLASS I			11409782		1473016		496726

B. NEW METHOD, FULL FORM

Group	Weight Pounds	EQUIVALENT WEIGHTS FOR TOTAL		PROTEIN		FAT	
		Cor. F. †	Pounds	Cor. F. †	Pounds	Cor. F. †	Pounds
1	2090	1.0	2090	1.0	2090	1.0	2090
2	833	1.0	833	0.7††	583	0.3	250
3	513	1.0	513	0.7††	359	1.5††	770
4	321	1.1†	353	1.4	449	7.5	2397
5	4353	0.7	3047	0.8	3482	1.5††	6530
6a	71	1.1††	80	0.9	62	8.0	568
b	12	1.2	14	0.6	7	20	240
Sum. of equiv. weights			6930		7024		12845
Type factors			1620		210		40
Calories in class I			11226600		1475040		513800

C. NEW METHOD, ABRIDGED FORM

Class I	Pounds
a Groups 1 to 4 and 6	3830
b Group 5 × 0.75	3264
	7094
Total calories	7094 × 1620 = 11,492,280
Protein calories	7094 × 200 = 1,418,800
Fat calories a, 3830 × 40 = 153200	
b, 3264 × 80 = **261120**	414,320

*The best reference in this field of science is Chemistry of Food and Nutrition, Sherman, H. C., Macmillan Co.

**From a correctional institution in the Middle West whose dietary is being revised after an analysis like that described in this article.

†Correctional factor.

††In practice the weights of items with repeating correctional factors are added and a single multiplication made.

Table VII

Comparisons of Calculations on the 8,000 Army Rations

	NEW METHOD		Usual Method of Individual Calculation	Miss Hunt's Quick Method
	Full Form	Abridged Form		
Total calories*.	32090	32756	32641	32016
Protein calories*.	3999	3904	3979	2962
Fat calories*.	7794	8785		
Difference from first column.				
Total calories in pct.	0.0	2.1	1.7	0.25
Prot. calories in pct.	0.0	2.4	0.4	8.7
Balance of ration:				
a (Prot: Fat: Carb.	12:24:64	12:27:61		
b (By Class. I	35.2	35.4	34.9	
II	1.5	1.5	1.5	
III	12.2	11.8	12.3	
IV	16.2	15.8	15.9	
V	15.9	15.5	15.8	
VI	4.3	3.8	4.3	
VII	14.7	15.3	15.1	
Per man per day.				
Calories.	4000	4100	4000	4000
Grams Protein.	125	122	121	93

*In numbers running into million, the first three digits are omitted.

proven thoroughly satisfactory, and such works as the "Adequacy and Economy of Some City Dietaries," and the "New York Police Squad Diets," the following are considered a good criterion for a satisfactory ration, so far as can be determined by this method.

Table VIII

CLASS	PER CENT OF TOTAL CALORIES	PERMISSIBLE MAXIMUM	RANGE MINIMUM
I	35	45	33
II	3	4	2
III	15	18	15
IV	9	10	8
V	8	9	6
VI	8	10	5
VII	22	25	20
(III 9a)	(7)	(10)	(5)

NEWS NOTES

A fund of $600 is again available for a fellowship or fellowships in Home Economics at the University of Chicago. Applications, with recommendations, should be in the hands of the chairman of the Home Economics Department before June 15. The graduate work may be done along any line of Home Economics. Students who have already done some graduate work will be preferred in granting the fellowships.

The social worker or the teacher impressed by the urgent need of improving the health of children will be interested in the experiment to be tried at the University of Chicago this summer. A group of underweight children will serve as a Child Health School to demonstrate methods of teaching health to children, both in the special nutrition class and through the regular school channels such as the physical training class, the cooking class, the hygiene lesson, the medical examination, the school lunch, and the general school teaching. The university students observing and working in the school will be home economics students and elementary and high school teachers who feel the need of better health teaching in their own classes, and social workers who have constant demand for health knowledge for the children in their care. Miss Lydia V. Roberts will be director of the school and Dr. Hoffman of Rush Medical School and Dr. Dorothy Reed Mendenhall of the U. S. Children's Bureau will serve as medical advisers. Work will begin on June 21.

The Dietitians' Section of the Home Economic Association of Philadelphia held its regular monthly meeting April 15 at the Pennsylvania Hospital, Eighth and Spruce Streets. The following program was presented, giving the viewpoint of graduates of Student Dietitians' Courses who have since entered various lines of dietetic work:

"Specializing in Dietetics for Children," Miss Edith Sullivan, Children's Homeopathic Hospital, Philadelphia.

"Organizing Courses for Student Dietitians," Miss Helen Markley, Cooper Hospital, Camden, N. J.

"The Management of a Tea Room," Miss Agnes Hawk, Penn Cottage, Wynnewood, Pa.; Miss Helen Shepardson, Bide-a-Wee Tea Room, 216 Old York Road, Jenkintown, Pa.

"The Dietitian in a Naval Hospital," Miss Margaret Posetes, U. S. Naval Hospital, League Island, Philadelphia, Pa.

"The Management of a High School Lunch Room," Miss Olive Gross, Kensington High School, Philadelphia.

"Managing a Hotel Diet Kitchen," Miss Helen Chase, Galen Hall, Atlantic City, N. J.

"Supervising the Dietary in a Contagious Disease Hospital," Miss Mary Reed, Philadelphia Hospital for Contagious Disease, Philadelphia, Pa.

"The Management of a Government Cafeteria," Miss Nora Yost, formerly of Government Cafeteria, Washington, D. C., Pennsylvania Hospital for Insane, Forty-ninth and Market Streets, Philadelphia.

"The Assistant Dietitian in a Large City Hospital," Miss Lucille Teed, assistant resident dietitian, Philadelphia General Hospital, Philadelphia.

"The Management of a College Common," Miss Emily B. Hall, Delaware College Commons, Newark, Del.

Miss Bess Tews has accepted a postion as dietitian in the Montefiore Home and Hospital, New York City. Miss Tews took student dietitian training with Miss Geraghty and later was at Kings County Hospital, Brooklyn.

Miss Irene Enders recently left Western Pennsylvania Hospital, Pittsburgh, where she has been assistant dietitian, to become dietitian in the McKeesport Hospital, McKeesport, Pa.

Miss Margaret Fotheringham of Buffalo, N. Y., is dietitian in the metabolism ward of Mercy Hospital, Pittsburgh.

The Dietitians' Section of the H.E.A. of Philadelphia held its regular annual meeting, Saturday, May 1, at the Woman's Homeopathic Hospital. The Executive Committee for the coming year was appointed as follows: Chairman, Mrs. Jennie M. Fuller, Pennsylvania Hospital, Philadelphia, Pa.; secretary, Miss Inez Griffin, Children's Homeopathic Hospital, Philadelphia, Pa.; treasurer, Miss Meta Reese, Methodist Episcopal Hospital, Philadelphia, Pa.; Mrs. Emma Smedley, director school luncheons, Philadelphia, Pa.; Mrs. Gwendolyn Hubbard, social service department, Children's Hospital of Philadelphia.

After the business meeting refreshments were served by Miss Euphemia Cameron, resident dietitian, Woman's Homeopathic Hospital, Philadelphia, Pa.

A new and more glorious gift of power compensates for each worthy expenditure, so that it is by work that man carves his way to that measure of power which will fit him for his destiny, and leave him nearest God.—Holland.

HEALTH AND MODERN INDUSTRY

Conducted by BARROW B. LYONS
15 Fort Washington Avenue, New York City

THE GROUP INDUSTRIAL SURGICAL HOSPITAL

A. MONCRIEFF CARR, M.D., U.S.P.H.S., Philadelphia, Pa.

By a "group industrial hospital" is meant a hospital serving a large or small group of industries, preferably of the same type. Few single industries can afford to maintain establishments and employ the best surgical personnel and necessary skilled help required for adequate service. So we have a few larger industries fairly well served, and the innumerable smaller miscellaneous industries, not being able to secure the best surgical skill or hospital care because of expense of maintenance, have to take what they can get, to the detriment of the injured.

At present the great mass of the injured are treated in general hospitals and no special care is given. The injured man is seen by the "visiting" or by the plant physician, and administered to by the intern, whose treatment is largely that of experimentation. Very often the visiting surgeon is a general surgeon and knows little of modern bone surgery or other industrial surgery, and nothing at all of industrial relations. The nurses are pupils and cannot appreciate the problem of the injured worker. From a personal experience, as chief resident in a hospital of a large manufacturing center, I know that it was a common thing among the staff and nurses to regard the industrial case as a nuisance.

A reasonable and practical solution of the problem would seem, a central hospital, with outlying dressing or emergency stations, organized for prompt, efficient service, serving a group of industries, emergency and surgical, cooperative and follow-up, reconstruction and rehabilitation service, with a selected, trained personnel, developed on a unit system for the special needs of the group, should be features of the hospital.

In connection with the planning of a central hospital, the importance of an industrial survey of the industrial group should be emphasized. Types of accidents should be estimated, comparison made with other groups, so that an intelligent plan may be perfected. For instance, a survey of New York's lower west side would reveal an immense amount of shipping, which spells serious accidents and infections; the congestion of traffic points to the need of establishing a central "base hospital" with outlying "dressing stations" on the "front line."

Before the various departments of the hospital are taken up in detail, it is well to call attention to the keynote of success in the salvation of the industrial cripple. This may be summed up in the term "personnel." Readers will perhaps tire of the seemingly unnecessary description of the requirements of the chiefs of the departments, herein recorded, but, heretofore, too little attention has been paid to the personal characteristics essential in the specialty of industrial surgery.

The chief surgeon is first an industrial surgeon, and, preferably, one who has had experience in modern war surgery, which will enable him to fully appreciate aftercare, aside from the actual surgery done. As the military commander studies the daily life of the soldier, so should the industrial surgeon be thoroughly conversant with industrial relations. It is strongly urged that the man selected for the key position of chief surgeon be a socially minded young man of executive ability, whose reputation as a surgeon can be proved by his record of successful cases. His assistants should be chosen as much for their ability to cooperate as for their natural talent and experience.

The industrial nurse should be a graduate, and not a probationer or even a pupil; neither of the latter has had sufficient experience either of life or industrial work to appreciate the workers' problem, or to realize its importance. Some will immediately say that graduates will not do ward work. Yes they will, if properly paid!

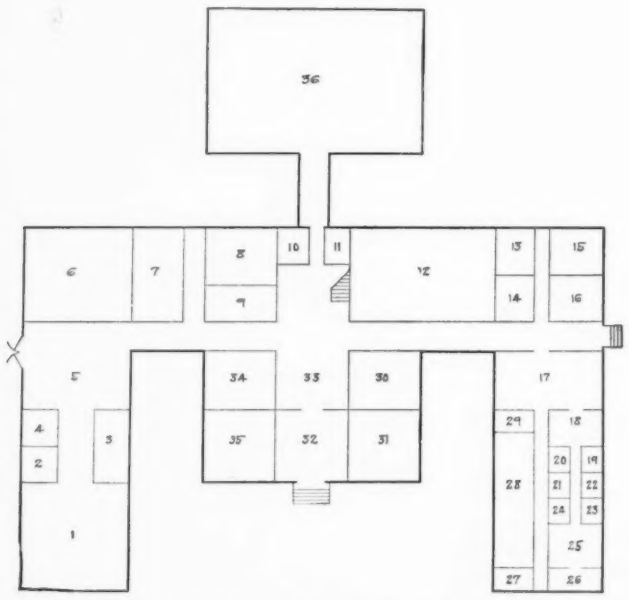
Lastly comes the question of salaries, and one of the most uncertain. It is fair, however, to say that the salaries paid to full-time men should compare favorably with other business. A surgeon who nets $15,000 a year in practice could not be asked to accept less as chief surgeon; his assistants would be paid according to ability, experience, and responsibility. Nurses' salaries should be proportionate to that paid in private work, modified by the fact that the employment is steady.

It is the purpose of the following plans and accompanying diagrams to suggest a workable basis which can be modified, or added to, according to the community's needs. However, the need of a change from the usual type of general hospital, as now established, to one that more nearly fits the need of an industrial group, is indicated. What is omitted in the written description, such as office equipment and arrangement, is indicated in the diagrams; detail is left to those concerned in the final perfecting of such a hospital, the plans presented here being suggestive only. The departments are taken up in order of their importance and logical sequence, from the admission of the patient as "a case" to his departure as a well man.

The receiving department is the reception room of the injured man's home for the period of his disability. The majority of receiving rooms, even in the modern hospitals, have a gloomy and depressing atmosphere, aside from the architecture, and the patient's first impression of gloom is often lasting. From the time the case is taken from the ambulance or seen by the admitting physician until he is sent home, he should be made to feel that the best that can be done is being done, in the most efficient manner, with courtesy and kindness. No physician or nurse that has not been trained in receiving ward work

has any business in this most important department; and only those who have tact in dealing with working people should be in charge here.

The record system should have brevity as its symbol; only essentials should be put down. The special dispensary card should have the following essential facts recorded: name, address, home and factory, nearest kin, social state, name of foreman, occupation, time of accident, provisional diagnosis and temporary treatment. This



First Floor, Group Industrial Surgical Hospital. 1. Disposition or observation ward. 2. Ward toilet and bath. 3. Patients' property. 4. Admission baths. 5. Admitting room. 6. Dressing room and records. 7. Apparatus repair and splint shop. 8. Ward and operating room supplies. 9. Pharmacy. 10. Bed elevator. 11. Passenger elevator. 12. Offices for chief of follow-up and three assistants. 13. Genito-urinary clinic. 14. Ear, nose and throat clinic. 15. Dental clinic. 16. Eye clinic. 17. Waiting room. 18. History room. 19 to 24. Dressing rooms, (men's). 25. Examining physician. 26. Laboratory. 27 and 29. Toilets. 28. Women's examining department. 30 and 34. Clerical force. 31. Conference room. 35. Record room. 32. Information and telephone. 33. Waiting room. 36. Engine room and kitchen.

card should be sent to the ward with the patient, with the additional data of: bath given, property listed, tetanus antitoxin administered, and statement as to whether the case is infected or clean.

Receiving Department Work Important

In the arrangement of space in most general hospitals, little or no attention has been paid to doctors' or nurses' suggestions as to the convenience or even necessity of proper apparatus in proper places, or of space for turning corners, or adequate lighting. Heretofore an architect has been asked to draw a plan based on his knowledge of previous plans, and he has often disregarded suggestions made by those most concerned in the future service of the building. Many hospitals have a receiving department seemingly as an afterthought—at least so it seems from the appearance of some of them. It is suggested that this department be given consideration worthy of its place.

With the chief surgeon a full-time man, it would seem possible to have him see immediately the cases brought to the hospital direct, or sent in by outlying stations, and pass judgment on the further disposition of the patient, as to proper ward placement and initial treatment. A ward of sufficient size to meet emergency needs should be established in connection with the receiving department. As it is now in most general hospitals, the "case" is seen by the intern, and the most frequent expression heard is: "I guess we'll put him in such and such ward." Sometimes it has been half a day or whole day before the chief surgeon has seen him. The routine of this department should be carefully and minutely outlined, with no openings for mistakes. Lastly, a routine administration of tetanus antitoxin should be a steel-bound rule, neglect of which should mean immediate dismissal, as it meant court-martial in the Army overseas.

It would be an insult to present-day knowledge not to include in such a program a department for pre-employment and periodic physical examinations. The arrangement of examining, waiting, dressing, and record rooms should be such as to enable one doctor and attendant to examine a reasonable number of applicants in a short time. If the amount of this work proved to be very great, a full-time examiner would be required, and for the best results it has been found that better records are made by one doing this work exclusively, instead of by members of the staff taking turns at it. In this department could be placed any special clinics, *i. e.*, eye, ear, nose and throat, genito-urinary, and dental, as indicated by the survey, and the policy of the management.

Ambulance Service

It would be good for every ambulance surgeon and driver to ride in an ambulance—as a patient! The longer the ride, the sooner would be brought about the necessary reform of almost every present ambulance service. Most ambulances are driven as if the patient were on a joy ride, and the pavement of glass instead of cobbles and trolley bunkers. The present qualifications of the usual driver are knowledge of streets, and experience (of a kind) in driving. It is maintained, however, that every hospital should be equipped with up-to-date and comfortable ambulances and should employ a personnel trained in handling sick people. If there are outlying stations there should be an ambulance to serve each one, supplementing the central service.

The Surgical Department

In considering this department, one cannot get much further than principles. The scope of industrial surgery is largely fracture work, repair of large wounds, which includes nerve and tendon injury, or a combination of all these.

A well known, successful industrial surgeon, who was also a chief surgeon, stated, when the question of infection, the bane of the operator, came up, that he had had extremely few infections in fifteen years of experience. He said the reason for his success was partially due to his constantly keeping in mind the maxim of that master mind and hand, John B. Murphy, that the way to prevent infection was to keep away from infection.

At any rate, the thought seemed a good one, and from it comes the idea of separate operating rooms for infected cases and clean cases, respectively; and, by separate is meant operating room itself, sterilizing room, supplies, instruments, anesthetizing room, scrub-up room, etc.

The size, arrangement, equipment, operating routine, cannot be given space here, but there are a few salient points regarding surgical equipment that would aid in making things run smoothly:

Having two full sets of surgical instruments; two teams of surgical nurses; anesthetizing on the operating table; swinging doors done away with, and electrically operated sliding doors substituted; bacteriological tests made routinely for slips in surgical routine; bacteriological tests in

sterile routine of gauze, sutures, etc.; location of operating rooms convenient to wards, and heated passage to and from operating room and ward.

In consonance with the idea of separate operating rooms for infected and clean cases, it follows that separate wards should be considered, the one for infected cases, of course, being of smaller size, allowing approximately for 60 per cent of all cases being clean, especially in the light of the modern treatment of wounds.

When a case adjudged clean develops infection, it should immediately be moved into the infected ward, and all the dressing instruments thoroughly disinfected and sterilized; the infected case should be treated as a danger to other patients. Grouping of similar cases not only is easier for the nurses, but the psychology of it, in regard to the patient-employee, is sensible; this principle could be followed with benefit throughout the entire time of hospitalization.

As to capacity, arrangement, etc., reference is made to diagrams. The ward of ten or twelve beds is easier to manage than one of twenty or twenty-four beds, which is usual even in many modern hospitals, and the work of the nurses in a small ward is more effective. This department would be incomplete without a plaster room with full anesthetic equipment; the splint and fracture apparatus room should not be attached to the ward, but should be an entirely separate room near to the repair and carpenter shop. A master carpenter or cabinet-maker, capable of making every known splint or its modification, on short notice, should be in charge. There should be an abundance of every possible appliance.

It is a question whether a solarium should be attached to each ward, or whether a solarium should be built to accommodate all the hospital cases. Certainly a smoking room, equipped with necessary amusement paraphernalia, should be a part of each ward.

Medical Wards

If the survey reveals a sufficient number of medical cases to necessitate a special ward, its construction need not differ materially from the other, except the provision of two quiet rooms. It need not be as large as the surgical wards. If there is a venereal clinic it is thought that, from an economical standpoint alone, a separate ward should be arranged for; but this depends on the policy of the management.

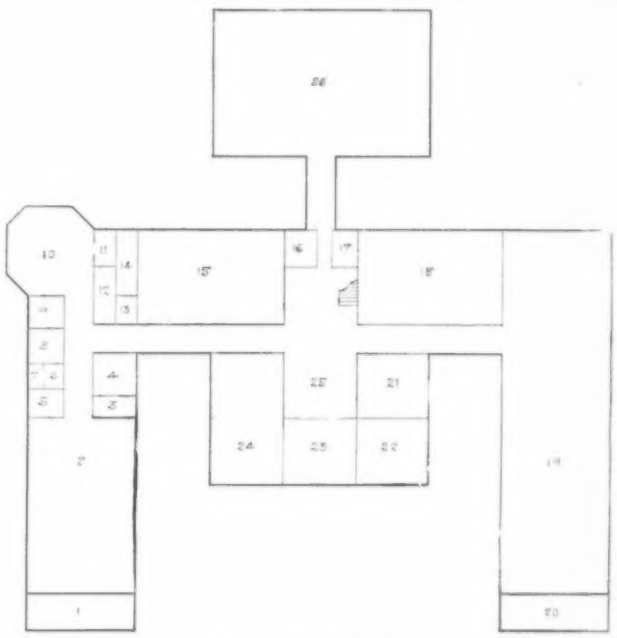
Laboratory

It would seem that laboratory work could be largely confined to bacteriological work, with necessary routine tests, when called for. Owing to the nature of the work in such a hospital, every facility for research work in bacteriology and serology should be provided as an aid to the surgeon. Emergency serums could advantageously be kept on the wards and in the receiving ward, and a stock supply in the central laboratory. A resident pathologist is pre-requisite.

X-Ray Department

It is hardly necessary to comment on this indispensable part of an industrial hospital. However, if a bedside outfit were part of the equipment, it would add considerable efficiency and obviate a great deal of delay and discomfort to the patients. More attention should be paid to progress reports in this department, leading up to a final report before the patient leaves the hospital, or perhaps a year after, for review of the case at the staff conference.

In this department comes the second stage of a man's return to work, and in most cases it is the hardest for him. It is also difficult for those who have his care. So much has been written on the psychology of the cripple and the treatment of his mental attitude during convalescence, that the reader is referred to the many articles on reconstruction published during the war. However, there are some things necessary besides mere equipment; "personal touch" might be considered the most useful

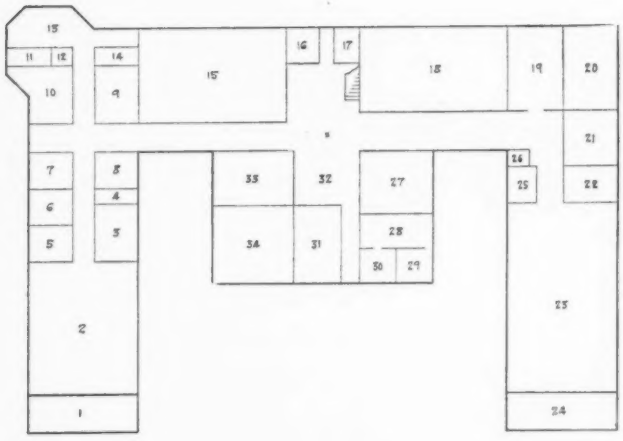


Second Floor, Group Industrial Surgical Hospital. 1. Solarium and smoking room. 2. Clean surgical ward for 12 beds. 3. Nurses records, etc. 4. Dining and serving room. 5. Ward toilet. 6. Linen room. 7. Laboratory nook. 8. Plaster room. 9. Anesthetizing room. 10. Operating room with automatic sliding doors. 11. Scrub-up. 12. Sterilizing. 13 and 14. Surgeons' smoking and dressing room. 15. X-ray and laboratory departments. 16 and 17. Elevators. 18. Offices of chief nurse and assistants and nurses' rest room. 19. Infected ward, homologous to clean ward. 20. Solarium. 21. Reference library and conference room. 22. Offices of chief surgeon and assistants. 23. Office of superintendent. 24. Case records, clerical force and bookkeeping. 25. Waiting room. 26. Dining rooms for all personnel.

asset in this department. The convalescent industrial case is as human as any, and during the period of compulsory inactivity he needs encouragement; the interest taken by someone who understands is often much appreciated. Nowhere can the convalescent receive more sympathetic encouragement to get back on the job than in this department, and the selection of a personnel under the direction of a surgeon experienced in this work should be considered of paramount importance.

The personnel should consist of one surgeon used to handling industrial workers, having fair knowledge of many of their individual jobs, and able to demonstrate the necessary treatments in each case. He should be allowed to select his own workers according to their ability, personality, and willingness to cooperate; the number of workers should be sufficient to care for easily, without haste, all the cases under consideration. Physiotherapy includes: the application of massage, electrical and manual, and of hot and cold water, baking, muscle re-education, and gymnastics.

The arrangement of the various rooms should be determined by the order of their use. Massage tables, baking apparatus, and light and whirlpool baths, with electrical attachments at each table for any necessary applications of electrical currents, can be in one room; machines and applications for muscle and gymnastics require a room by themselves. If a department of hydrotherapy



Third Floor, Group Industrial Surgical Hospital. 1. Solarium and smoking room. 2. Medical ward for eight beds. 3. Ward dining and serving room. 4. Linen closet. 5. Ward toilet. 6. Nurses' records, etc. 7 and 8. Quiet rooms. 9 and 10. Semi-private rooms. 11 and 14. Private baths. 12. Linen closet. 13. Sun parlor and smoking room. 15. Residents' quarters. 16 and 17. Elevators. 18. Gymnasium, machines, electrical apparatus. 19. Recreation and smoking room. 20. Vocational work. 21. Dining and serving room. 22. Nurses' records, etc. 23. Convalescent ward for 12 beds. 24. Porch. 25. Ward toilet. 26. Linen room. 27. Massage, whirl pool baths, plint. 28. Rest room. 29 and 30. Douche and light baths. 31. Clerical force. 33. Offices for chief of reconstruction and assistants. 34. Residence recreation.

is required, a special douche room and vapor or light bath compartment, with necessary rest room, is essential.

The card system here is most important as a progress record, and should contain: surgical history, diagnosis and proposed treatment; all measurements of motion, strength, and other notes of progress should be carefully recorded for final review at weekly or monthly conference, both by the surgeon in charge of the case and by the chief surgeon.

Commissary Department

A hungry soldier can't fight efficiently, and neither can efficient hospital work be done on an inadequate and tasteless diet. If the story of a nurse who has had eating experiences in over twenty hospitals, in twenty different States, is to be believed, then the food department in most general hospitals is very often the most poorly managed. It would be hard to put one's finger on the exact cause of the usual poor commissary existing in most hospitals today; some say graft, some inefficiency in buying, some blame the cook, and some the dietitian. One does not hear complaints about the majority of good hotel dining rooms, though the problem is about the same, minus the individual table and waiter question, and the luxury waste. Hotels manage their kitchens on a profit and loss basis, and give service accordingly; hospitals should assume this attitude, at least, and the profit would accrue from satisfied personnel and patients, besides an actual saving from efficiency.

A slight change in the usual system now existing is suggested. Heretofore, the dietitian has had full charge, even of the buying. It is proposed to put in charge a hotel-trained chef, who will have entire authority in preparing the food. By entire authority is meant no divided authority. A nurse who has had training in dietetics will consult with the chef in regard to all food for the patients, and prescribe the menu.

The need and advantage of re-training an injured workman has been shown to be an essential part of any scheme for reconstruction, by the splendid work done during and after the war, in Europe and in this country. There are numerous plans from which to choose, and their application in the group industrial hospital is easily accomplished.

A few essential principles should be considered for effective work: vocational training, either along the line of the patient's work or in some similar trade, should begin in convalescence, even before the patient is out of bed; the book and chart work can be quite easily started in the ward. Before the first week is ended, an injured man should be surveyed, an estimate made of his probable disability, and also of his capability, classification recorded, and the training offered him. It seems more reasonable to emphasize an injured man's assets rather than his liabilities, and the mental attitude of the usually discouraged cripple when guided along the proper channels, not only gives him an opportunity for a "comeback," but puts him in such an environment that he wills himself into getting well and back on the job.

There are three main classes into which most injuries fall, and in some cases the man requires re-training:

1. Fractures and sprains of upper extremities.
2. Fractures and sprains of lower extremities.
3. Contractures, nerve injuries and muscle atrophy.

There might be added another class to include medical cases. These are basic, and other disabilities can be rated under these heads for all practical purposes. After a man has had a primary training in the hospital school, there could be a system of transfer to one of the workshops of the group, where he could finish the practical work. Such a department would call for the careful supervision of the surgeon in charge of reconstruction; teaching could be done by men or women trained in such work.

Quartermasters Department

This department can be divided into two depots, one for ward, operating room, and dispensary supplies, and another for general supplies.

1. Hospital Supplies.

The chief, a pharmacist, with an assistant who is a graduate nurse, should be in charge of hospital supplies. These would include drugs, chemicals for disinfection, laboratory, ward and operating room apparatus, and other necessary material, such as raw gauze, instruments, etc.

2. General Supplies.

These would include all supplies for kitchens, laundry, office, etc. This depot should be on a strict business basis and have a thorough checking system, and managed by a storekeeper.

The Follow-Up Service, Formerly Social Service

This department should be an integral part of the hospital, and the idea of charity, so general in hospitals at present writing, done away with. The same care should be used in the selection of the personnel of this service as that of any other department, basing it on experience and training in industrial relations, personality, and enthusiasm for the work. Lastly, the chief of this section should be a member of the staff, with equal privileges. The success of a follow-up service depends more on the chief than that of almost any other department; someone who can instill the principles of welfare work into the personnel, not with the idea of charity, but of cooperation with the hospital policy. The chief should know, to speak to, every patient in the hospital, also something of his history. Every assistant down to the most insignificant clerk should be taken through the hospital and shown the work and then given an opportunity to express a willingness to abide by those principles of the work. This should be the basis for employment.

The work could be divided as follows:

1. Dispensary.
2. Wards.
3. Outside.

These are equally important. The record work would include: records of all patients, in the hospital and discharged, with a brief summary of hospital record; weekly or monthly report, if called for, of all patients discharged within one year or longer; weekly ward reports; family follow-up reports; vocational reports; employment reports.

A chief with two assistants, one for the dispensary and ward service and one for the outside work, empowered to select the remaining personnel sufficient for effective work, should be placed in charge and allowed to run the department without interference.

The record system should have brevity and simplicity as its features. One of the essentials of all follow-up work is a clear history. Also an interpreter is an absolute requirement in this country of polyglot languages, and he is not only useful in this department, but frequently is very necessary to the surgeon.

Just a word on outside work:

While working with the War Risk Insurance Bureau, it was found that a man would be willing, almost always, to go to the hospital or sanitarium, or in training at the Federal Board, provided his family was taken care of. It would seem, therefore that if, while in the hospital, an injured man knew that his compensation was paid promptly, and that his folks had enough to eat and wear, the bond of loyalty to the hospital and his employer would be strengthened; and he would, forever after, be a booster for the service. Besides this, he would be greatly encouraged to make an extra effort towards a complete and rapid recovery.

The Record System

If at all possible, a complete card system is advised, doing away with the long history and treatment sheets which continually inspire verbosity on the part of historian and nurse. The system of card index is universally satisfactory, and, in the case of a special hospital, where the history is not a part of a teaching system, it would more than prove its worth in compactness, durability, and efficiency.

In an industrial hospital most of the cases are surgical, and do not require the taking of any lengthy previous history, but, nevertheless, do require certain essential facts to make them complete. A few of them can be mentioned here:

1. How, when, and where accident happened. This should be carefully recorded, and, if necessary, corroborated by witnesses, better by the foreman.

2. Physical examination of stripped patient to include any other injury or any complication aside from chief complaint or disability.

3. Daily notes of progress and treatment made by surgeon in charge.

It is unnecessary to enumerate details concerning the card used; the above are points noticed in review of numerous industrial surgical histories, conspicuous by their absence. The importance of a record system that really records is inestimable—establish a good record system before the hospital is built; otherwise a litigation may start which depends on one small record that is not complete—the cost will wipe out a fund sufficient to establish a bed in perpetuity.

The purpose of industry is production for profit, and a great deal of the profit depends on the health and contentment of the real producers, that is, the workers.

Heretofore there have been three main parties concerned in the welfare of the employee—the worker, the manufacturer, and the accident insurance company. These three should get together on a business agreement, and each receive an equal share of the benefits. The worker would receive health service worthy of the name, and none is too good; the employer would see an increase in production through a healthy and contented working force and a lessened labor turnover; the insurance company would profit accordingly. A result of the combination would be the community, making a circle around the triangle.

It seems a destructive attitude for one class to criticize another, and certainly does not get anywhere in solving the problem. The writer firmly believes that no final adjustment of things will be reached until the three classes concerned get together on an equal basis, each considering the other necessary to the plan. Perhaps the idea is too new, or sounds too idealistic for these strained times, but eventually there will be an adjustment of this problem and some such plan will be the working basis.

There are some things that cannot be done, and one of them is the prompt and efficient organization of group hospitals, with all their ramifications, by the State or Federal Government; somehow or other, politics creeps in, with its consequent inefficiency and endless red tape, which has the inevitable result of slowing up the machinery. The competition which would be stimulated by the group plan should keep up a better standard of efficiency. Legislation is a necessary aid, but the better plan is to prove that good service is the only right way, and not to compel employees to toe the line because of the law. This is not speaking in disparagement of the United States Public Health Service; however, this splendid organization is hindered at every turn by lack of funds for absolutely necessary work, such as hospitals for sick soldiers, and salaries for those who do the work. It already has too much to do.

In conclusion, what use will the work done during the great war, both in the Army at the front and in industry at high pressure at home, be to us, if not applied for the good of industry, its logical place? The establishment of group industrial hospitals, as outlined above, is thought to be a practical and reasonable answer to the solution of the problem of the industrial cripple, injured by accident or disabled by some other health hazard.

The Federal Board for Vocational Training estimates that there are among the injured veterans of the World War between ninety and one hundred cases of men whose speech became absolutely unintelligible as the result of mouth or neck wounds, aphasis, or other causes. Twenty-five per cent of these men are still in the hospital and 50 per cent are in training, or approved for training. The courses followed are agriculture, auto mechanics, commercial courses, and chemistry.

There are probably several thousand men throughout the country who became deaf in one ear, or who have suffered slight impairment of hearing in both ears. However, there are only about 200 for whom lip-reading is necessary. Therefore, the approximate number of hearing and speech defect cases will be about 300.

Health is the second blessing that we mortals are capable of—a blessing that money cannot buy.—Walton.

Health is the vital principle of bliss,
And exercise, of health. —Thomson.

VENEREAL DISEASES AND THE HOSPITAL

Conducted by ALEC N. THOMSON, M.D.
Director, Department of Medical Activities
The American Social Hygiene Association, 105 W. Fortieth St.,
New York City

THE NEED FOR HOSPITAL FACILITIES IN THE VENEREAL DISEASE PROGRAM*

By C. C. PIERCE, Assistant Surgeon-General United States Army.
Washington, D. C.

If the program outlined by the Public Health Service for the eradication of the so-called venereal diseases, gonorrhea and syphilis, is to be successful, it is of the utmost importance that some method be devised by which proper hospital facilities can be offered to many of these cases, and their admission into hospitals be at least as easy and as free from red tape as the admission of any other communicable disease ordinarily accepted by hospitals.

Regardless of the large amount of gynecological surgery made necessary by gonorrheal infections, regardless of the many victims of the neglected, untreated conditions caused by the Neisser infections and lues that apply daily to the hospitals for treatment, hospitalization of persons infected with these diseases is still in the era of the barber surgeon. Instead of accepting for treatment these diseases while they are amenable to treatment they are pushed from post to pillar, neglected, ignored, despised and shunned until they reach the stage of chronicity, frequently with irreparable changes.

I cannot but feel that this, in a large measure, is due to the fact that boards of managers and staffs are still under the "spell" that persons infected with venereal diseases are morally unclean and should be "plagued for their sins."

In a recent discussion in Chicago, Dr. William Allen Pusey discussing this phase, made use of the following forceful argument:

"I always have a feeling of regret when the moral issues are raised in these discussions on the medical aspects of the venereal diseases. I believe in discussing the moral side of this subject, but there is also a medical side—a sanitary side—which is worthy of discussion, and the invariable injection of the moral questions into every discussion of the sanitary and medical aspects simply confuses the discussion. We medical men understand—a fact which we apparently often are not given credit for—that there is a moral side to the venereal diseases, but we also understand that the subject is one which is capable of discussion as a medical and sanitary problem alone. The venereal diseases are diseases. They can be handled as diseases, and unless they are so handled we will never, in my opinion, get anywhere with them. We can not overcome the dominating influence of the sexual appetite as a factor in this subject. Education, religion, conscience, honor, fear, will influence a part of the community, but they will not hold the submerged tenth, to say nothing of their slight restraining influence upon a large part of the other nine-tenths. If I am convinced of anything, it is that to handle the venereal problem we must tackle it as a physical problem. I am ready to support all measures for the betterment of mankind, and for the improvement of his moral status, but I am not willing to lose sight of the fact that the venereal diseases are diseases and that, to control them, they must be handled as such."

It is a sad commentary on the medical profession and hospitals that until very recently it was impossible to have a venereally infected patient admitted.

It is true that, in isolated instances, in cases where an impending operation might be demanded, it was possible with a good deal of "pull" to have such a patient "pass the portals." But to enter a patient for a venereal disease per se was as difficult as for the proverbial camel to pass through the eye of a needle.

The blame for this state of affairs, however, is not entirely at the door of the hospital, but largely due to failure on the part of the medical profession to recognize the seriousness of these conditions, and to consider their consequences in the light of a public health issue.

Who does not remember the time when the treatment of these diseases was in the hands of the corner druggist, and the quack and charlatans thrived and waxed rich on the despised stepchild of the medical profession?

So persistently has this attitude of indifference and intolerance to the ravages of venereal diseases been carried out in our civil life that, upon the mobilization of the army, this important and sorely needed division was totally unprepared for the emergency and much valuable time was lost in extending treatment to the draftees who came to the camps in large numbers with well defined infections.

Major James Bayard Clark, M.C., U.S.A., in an article published in the *Journal of the American Medical Association*, August 26, 1919, in speaking of this neglect, writes as follows:

"In practically all but one branch of medicine, when the war broke out, there was a fairly well defined system which governed and held together the work of each department and served as a basis whereby it could be lifted up, whole, as it were, and transferred into the army service as a useful and workable unit.

"General surgery, for one, was well organized and prepared at once to begin creditable war work. The pathologic laboratory was laid out along such precise and practical lines that it was carried over with ease. Internal medicine, as ever, knew its way about and was ready on short notice to be mustered in and play its part; but the department of medicine which dealt with genito-urinary ills, the very one which was so sorely needed (and the one which will for a long time still in civil life be sorely needed) somehow or other did not seem to be held together in the same portable sense as the others. So the Medical Department of the Army was constrained to collect such loose pieces of this particular branch as could be found, and cement them into the semblance of a specialty and courageously meet the situation to which necessity and a drafted army gave such sudden birth. Since that time there has developed in our camps and cantonments and in our service abroad much that will go to make up a

*Read before the Twenty-first Annual Convention of the American Hospital Association, Cincinnati, September 8-12, 1919.

useful beginning in that campaign against the sexual infections which is now plainly ahead."

Very few men indeed appeared at camp requiring surgical or medical care, but one has only to peruse the report of the Provost-Marshal-General to get an idea of the enormity of the venereal problem.

The American Hospital Association, at its annual convention, Atlantic City, September, 1918, went on record as endorsing the government program which advocated the admission to hospitals of persons affected with venereal diseases requiring bed care. Few hospitals are yet willing to accept these cases; and, when they do admit them, the care and treatment is not carried on with enthusiasm and sympathetic interest.

To ascertain the attitude of the hospitals toward this phase of the venereal disease program, a questionnaire was sent out on August 5, 1919, to twelve prominent hospitals. The following analysis of the answers received from ten of the hospitals would seem almost to deny the endorsement of the American Hospital Association: Two of the hospitals did not reply even after various letters and telegrams had been sent. Five answered yes to every question. One answered no to every question. The remaining four had various conditions. To the question, "Are acute venereal infections accepted for treatment?" one replied, "Yes, syphilis and chancroid." A second, "Occasionally, if patient can afford private room and special nursing." The other two said, "No."

The second question, "Are acute complications of gonorrhea and syphilis accepted for treatment?" received the following replies: From one, "Gonorrheal arthritis and epididymitic and syphilitic iritis, also pus-tubes are accepted." A second, "Acute complications of syphilis—yes; gonorrhea—no." The third: "Depends upon the condition for which treatment is required and the state of our wards. Whether they can be cared for without danger to the other patients." The fourth said, "No."

To the third question, "Are surgical cases having acute venereal infections accepted for treatment?" One answered, "If surgical condition is acute;" another "Under certain circumstances;" a third, "If surgical condition is emergency gonorrhea—yes; otherwise, no. In the case of syphilis, yes, under all conditions;" the fourth, "Depends upon the surgical condition and need for immediate surgical treatment."

To the fourth question, "Are children affected with gonorrheal vaginitis accepted for treatment?" one answered, "When vaginitis is a complication of another condition"; another, "No, not for this condition. Patients are admitted for other conditions and are found to have gonorrheal vaginitis." The other two said, "No."

To the fifth question, "Are infants affected with ophthalmia neonatorum accepted for treatment?" one answered, "On ophthalmic service if they present themselves." One said, "Yes," the other two "No."

To the sixth question, "Are adults with gonorrheal ophthalmia accepted for treatment?" one said, "Yes, if any present themselves." The remaining three said, "No."

It is hardly necessary to state that the majority of patients suffering from venereal infections are ambulatory, and comparatively few require detention in hospitals. Clear differentiation must be made between the patient requiring bed care and the prostitute who is detained as an active carrier. The Public Health Service does not approve of detaining such carriers (prostitutes) in a general hospital ward except in cases of great emergency.

The need of hospital beds for syphilis has been ably discussed by Dr. John H. Stokes in an article published in THE MODERN HOSPITAL in the May, 1919, issue, and reflects the attitude of the Service. In summarizing the ways in which the general hospitals should contribute to the management of syphilis, Dr. John H. Stokes, says:

"1. Syphilis is often recognized by the hospital serologist when no other signs present themselves. The hospital serologist, by reason of training and environment, is specially fitted to be the preformer of an authentic and trustworthy Wassermann, which is badly needed in these days. Of 500 patients examined by Horner (Boston City Hospital), 16 per cent had syphilis, although only 2 per cent had been identified by other means than the Wassermann.

"2. Syphilis needs, for the proper care of its medical, surgical, neurological and special complications, the prolonged observation, cooperative diagnosis, and control which only a stable, well-organized hospital service can supply.

"3. The actual technique of the intensive treatment of syphilis requires beds. Therapeutic control, a low mortality, and the successful management of the very sick patient, which is much commoner in syphilis than is generally realized, all demand something more than ambulatory facilities.

"4. The hospital bed service is needed for a brief but necessary quarantine, which can be carried out without the slightest risk to other patients or the medical and nursing staff.

"5. Well-organized treatment for syphilis, such as a hospital service can provide, has the same value in syphilis as sanatorium care has in tuberculosis. It is a factor in inculcating a sense of social responsibility in the patient and in encouraging ideals of rehabilitation and cure.

"6. Organized hospital care of syphilis provides centers for the follow-up control so essential in the disease, for the development of the record system, and for the outside professional cooperation essential to adequate treatment.

"7. The hospital service provides the only place in which syphilis can be made a subject of thorough study and research.

"8. The existence of a specially organized service for syphilis is of material assistance to any hospital group of diagnosticians in the prevention of blunders which arise from overlooking syphilis as a factor in diagnosis, and in the protection of staff and patients from the dangers attendant upon the admission of unrecognized contagious cases to wards and operating rooms without adequate supervision.

"On each of these points it is possible for any active syphilological service to supply an abundance of concrete evidence. I have seen three extragenital infections in one year in the surgical personnel of a five-hundred-bed hospital, all of which could have been prevented had there been adequate diagnosis of syphilis. The diagnostic blunders of a staff which lacks a syphilologist and a syphilological service to put an edge on the recognition of the disease are often serious, but are properly the subject of a medical rather than a general presentation. Emphasis should be placed on the need of beds for intensive treatment. The administration of arsyphenamin has enough complications and enough serious effects, direct and indirect, to justify the same period of hospital observation as a tonsillectomy. The really intensive treatment of syphilis, if carried out by a dispensary, must either subject the patient to unreasonable risk, or sacrifice effectiveness by reductions in dosage and loss of therapeutic control."

The need for beds for persons infected with chancroid is limited to those cases which require surgical interference and extensive and frequent dressing, measures which cannot be carried out in the home. This disease being found most frequently in connection with poverty and unhygienic surroundings is essentially a problem requiring hospital recognition.

The need for hospital detention for patients affected with gonorrhea is not as great as might be supposed. As has been pointed out previously, the majority of these patients are ambulatory, and in but few instances require bed care.

In the male the character of cases requiring hospital attention are in the main, prostatitis, cystitis, perineal abscesses, retention, epididymitis, and the rarer infections

of the renal pelvis and the kidney. Gonorrheal endocarditis and arthrites seem to have escaped the odium and are generally considered hospital cases and freely admitted as such.

In the female inflammation of Bartholin's glands, very acute vaginitis, cystitis, and inflammation of the uterus and its appendages, are the conditions for which hospital care is requested.

In a recent article published in THE MODERN HOSPITAL, I pointed out the fact that syphilis and gonorrhea are not more readily communicable than typhoid fever or pneumonia, and are more easily nursed. Precautions similar to those observed in the care of persons ill with typhoid fever will prevent the spread of gonorrhea, syphilis, and chancroid to other patients, nurses, and attendants.

The facilities for examination, diagnosis, and treatment, adequate isolation, equipment, and a system of social service and follow-up have been put forward as financial reasons why hospitals could not take venereal diseases.

Few diseases have been so neglected, so deprived of the hospital treatment they have needed, as gonorrhea, syphilis and chancroid. Popular prejudice is probably responsible in a great measure for this neglect. The psychological effect on the patient who occupies a bed adjoining that of one infected with a venereal disease is not so much the fear of contracting the disease, as a revulsion against the propinquity of a "bad disease," since "bad diseases" are contracted by those who indulge in sexual wrong-doing. Far from being true, such people are, therefore, "bad people" and should not be allowed to occupy the same ward with persons infected with typhoid or pneumonia, regardless of their past history. The hospital, by not admitting the venereal disease patient, endorses this belief.

When the Service urges the hospitalization of certain cases of venereal diseases, it does not mean to make an arbitrary demand that every hospital, regardless of its equipment, finances, etc., shall receive a definite number of beds for gonorrhea and syphilis any more than it asks that so many beds be set aside for typhoid fever cases where it urges that all typhoid patients be hospitalized, but rather it asks that hospitals should function as centers of disease prevention and admit, when necessary, patients who are spreading dangerous communicable diseases, regardless of the manner in which such patients became infected.

The hospital of today has assumed a greater responsibility than merely providing bed space and ordinary nursing care; it has come to be, or should be, an educational institution where the young doctor and the young nurse who are to interpret the new public health of tomorrow, receive the greater part, the humanizing part of their education. Here they make the personal contact that is so essential to public health education.

If the hospital continues in its attitude of merely providing care and comfort for those cases which require no isolation, no special responsibility and refuse those cases which are unfortunately stigmatized, which are difficult of management and less attractive than surgery, or the interesting medical cases not constituting public health problems, the hospital falls far short of functioning as a modern scientific institution for the conservation of health.

The medical profession as a whole must be made to realize that the venereal disease problem is a serious one, that venereal disease patients are a menace to the public, and that their isolation and treatment is as serious a concern as the prevention and eradication of any other communicable disease. Unfortunately, this awakening to the realization of the serious rôle played by venereal diseases in the life history of the human race is slow.

I again beg liberty to repeat that these diseases do not represent a greater hospital problem than typhoid fever, pneumonia, etc., and the brief but necessary detention and care can be carried out without any more danger to other patients or to the nursing and medical staff than that of other communicable diseases.

"The Need for Hospital Facilities in the Venereal Disease Program" literally interpreted, means admission to hospitals for all cases of venereal diseases needing bed care; better diagnosis for all cases, so that obscure conditions which are frequently luetic may be discovered, classified, and treated accordingly, and better follow-up work for all cases, so that end results may be obtained, all of which would be reflected in a more sound public health.

DISEASE, AN ECONOMIC FACTOR

In a comprehensive report on disease conditions in the old world, Dr. Hugh S. Cumming, Surgeon General of the United States Health Service, states that the man-power of the world is woefully short, not only owing to the casualties of the war, but also to the ravages of disease and famine. Regions, where in normal times large quantities of raw materials and foods are produced, have been left unproductive as an effect of the presence of epidemics of diseases that have been, and are even now, sweeping through Asia and central Europe. Old world production in a number of countries has ceased or become inadequate as a result of disease. In British India in 1917 there were 267,002 deaths from cholera, 62,277 from smallpox, 437,036 from plague, and 4,555,221 from "fevers," a large proportion of which were due to malaria.

The economic loss caused by disease conditions is inestimable. Statistics for the countries that are suffering the most, are not available; however, approximation of the economic loss may be made from illustrative comparisons. Malaria fever, a disease with a low mortality, has 7,000,000 victims annually in the United States, though the death rate is not high. Each case of malaria represents a loss of several working days, and a lowered efficiency. In tropical countries malaria is more prevalent and more deadly than in this country. In India it causes one-fifth of the total deaths. With the eradication of hookworm diseases in the Philippines, health experts assert, the efficiency of labor would be increased 30 per cent. Diseases such as pneumonia, typhoid fever, and tuberculosis, aside from their high death rate, have an extremely large number of sick days, involving tremendous economic loss.

All of these diseases are preventable, and Dr. Cumming urges increased activity on the part of health authorities to assist in bringing about conditions conducing to health and maximum human efficiency.

LICENSING MATERNITY HOSPITALS

The State Commissioner of Health of Ohio recently defined the maternity or lying-in hospital, as any institution admitting maternity cases, whether a maternity hospital, a department or ward of a general hospital, or a private home used for this purpose. It is necessary for such hospitals to obtain a license from the State Department of Health and to comply with the regulations in regard to sanitary equipment and proper record-keeping in these hospitals. The term of the license is for one year, and the name of the licensee, the number of patients to be accommodated, and the location of hospital or home must be stated.

PROGRESS IN EQUIPMENT AND OPERATION

Conducted by FRANK E. CHAPMAN

Superintendent, Mount Sinai Hospital, Cleveland, Ohio

HOSPITAL TABLE LINEN

One of the great problems of hospital administration today, is the securing of proper table napery. There is an inborn feeling in most of us that linen tablecloths and napkins are absolutely necessary, and there is no question that with the pre-war differential between linen and cotton goods, it was economy to buy a fairly high percentage of linen goods. This condition, however, has changed materially with the increasing cost of linens and with the inability to get them.

A great deal of experimentation has been conducted and is still in process in an attempt to secure a better appearance for cotton table linen. There is being put on the market a new process cotton article for which great claims are made.

It is claimed that this treated cotton which is a very high grade piece of cloth, will retain a linen finish throughout the life of the cloth. The fabric is subjected to a process that penetrates into the fibre and is guaranteed to last. There is every appearance of linen of high grade in the cloth after it is washed.

If the claims of the manufacturer can be borne out in actual wear, there is no question but that this step offers one solution of cutting down table linen bills of institutions.

EDITOR.

THE CARE AND UPKEEP OF BOILERS

By S. S. BALCOME, Engineer, Worcester, Mass.

The care of the boiler consists largely in keeping it clean inside and out. Impurities, such as sand and mineral salts in solution in the feed-water, cause trouble inside the boiler, and soot from the fire causes trouble on the outside, or fire side, of the boiler.

Sand in the feed-water may be washed out through the blow-off pipe whenever the boiler is cooled down, but lime and some other salts which are carried in the feed-water as a solution are thrown out of solution and precipitated on the hot sheets and tubes of the boiler. Lime, especially, will form a very hard scale on boiler tubes and shell, and is sometimes hard to remove. Many companies advertise boiler compounds guaranteed to dissolve scale of all kinds in a boiler, some of them having a compound which is a "cure-all," others requiring a sample of feed-water for analysis before prescribing for the boiler. Many boiler compounds are valuable when used rightly, but no one of them is effective for all cases of dirty boilers. Mechanical cleaning is recommended whenever it is possible to reach the different parts of the boiler; otherwise a good boiler compound should be used.

By mechanical cleaning is meant cleaning inside the boilers by scraping and chipping off the scales, and by using a steam, air, or water-driven turbine. Water tube boilers having reasonably straight tubes can easily be cleaned by the turbine cleaner, of which there are several types. A turbine cleaner should move slowly through the tube, because if it is permitted to cut in one place too long, the tube itself will be weakened. When the turbine sticks and binds, it should be drawn back about four inches and be allowed to cut in that place for a few seconds. This should be done until the cleaner passes through freely.

As the water evaporates, the solids and some of the mineral salts make sludge or form hard scale on the tube, crown sheet, or bottom of the shell. There is a certain pressure in the boiler of, say, 100 pounds to the square inch, or seven and two-tenths tons to the square foot. If a boiler is coated with scale on the inside, the fire on the outside will heat the sheet tube to a high temperature, because the scale is not a good conductor of heat. When the metal has been heated to a red heat, it has lost its strength, and the pressure in the boiler blows it out like a bubble, cracking the scale and allowing the water to come into contact with the metal, cooling it, and causing it to remain in that form.

This is called a bag on a boiler shell or tube, and if it is very large, or bulges very much, and the metal has stretched, it must be cut out and replaced with a patch. If the bulge is not bad, it may be brought to a red heat by using torches, and hammered back into place. This should be done under the direction of a man experienced in boiler work. A bag on the bottom of an externally fired boiler, if not cut out or hammered back into place, is a source of danger, because it forms a pocket where settlings will accumulate, thus filling up and perhaps getting overheated again.

In water tube boilers, scale may form in one or more tubes, causing them to bulge or even rupture, and in that case the only remedy is to take out the defective tube. This is one of the advantages of a water tube boiler, as a new tube will make it as good as new, while the patching of a cylindrical boiler brings a seam directly over the fire.

Oil or grease also will cause a boiler to bag and leak at the seams, and in hospitals and like institutions care should be taken to keep it from getting into the boiler, especially when using exhaust steam from reciprocating engines for heating. These engines, in general, are equipped with oil separators connected in the exhaust pipe, but a certain per cent will get by the separators. This per cent should be very small when good separators are installed and properly managed, but what does pass through the separator slowly accumulates in the exhaust pipes and heating system and works through the return pipes to the open heater or return reservoir, and from there to the boiler.

These heaters and return reservoirs, which are generally steel tanks, should be overflowed two or three times

each day, to remove any oil which may have passed into the tank or heater, and is floating on top of the water. Steam from turbines does not contain any oil, is clean, and furnishes the best boiler feed water when condensed. This is one argument in favor of using steam turbines in an institution.

The soot which accumulates on the surfaces of boilers should be cleaned off by blowing jets of steam over them (if a water tube boiler), and through the tube (if a fire tube boiler), at least once every eight to twelve hours. In addition to this, they should be scraped occasionally. This soot is a very poor heat conductor and insulates the boiler tubes from the heat of the fire and gases. Both these conditions, scale inside the boiler and soot on the heating surfaces, will lower the efficiency of a boiler and result in a high temperature of the flue gases in the uptake and chimney.

Temperature measuring instruments installed for instantly indicating the temperature of the flue gas are of great value, and should be a part of the equipment of all boiler rooms of any size. There are many types of these instruments, both indicating and recording.

Boiler furnaces made of brick should be kept in repair. The whole boiler setting should be looked over once in a while and all cracks and openings in the walls of the setting and between the boiler shell and the brick work should be filled up. This is a measure of economy, because there is always a negative pressure in the boiler furnace, due to the chimney draft, and this will cause air to be drawn in through every opening. This air cools the boiler and lowers the efficiency of the whole steam generator.

Water glasses and water columns should be blown out by the blow-off valve attached to the bottom of the water column, twice every day, at least. This keeps the passage between the boiler and water column open so that the glass does not show a false water level. Bottom blow-off valves should be opened once a day to change the water and blow out the dirt at the bottom of the boiler. In the opinion of the writer, the real value of this rests in the fact that a certain percentage of the water is changed.

Stop valves on the main and branch steam lines at the top of the boiler are sometimes left to corrode, through neglect, so that in case of an accident to a steam pipe or valve, when it is necessary to shut the main stop valve quickly, the valve in question cannot be operated. Periodic opening and shutting of these valves will eliminate this trouble, and also show when the valve needs packing. Repacking around the stem once or twice a year is generally sufficient to keep the valve stem in good order. Check valves on feed water pipes need repairing, or at least regrinding once a year, especially if a reciprocating pump is used, as the impulses of the pump cause the check valve to open and shut with every stroke, even when a duplex pump is used.

When fire tubes, such as those in the horizontal return or vertical boilers, are installed, the repairs are very slight if the boilers are kept clean, the furnace being in need of a good share of the attention because fire bricks will burn away and fall out of place, thus requiring the furnace walls to be patched up, or even newly lined.

Most water tube boilers are fitted with baffles, either across or along their tubes, to guide the hot gases to every part of the boiler on their way to the chimney. These baffles are made up of a mixture which resembles fire brick, and are made to resist the action of high temperature. They generally stay in place very well, but there is always a chance of some of the blocks falling out of place, due mainly to expansion and contraction of the boiler tubes. If these baffles are out of repair, the hot gases cut through them straight to the chimney and thus by-pass part of the boiler tubes, and cut down the efficiency of the boiler. This can be determined by trying the temperature of the flue gases, which will be higher than normal. The temperature of flue gases just before entering the chimney should run about 450° F. to 600° F., depending on the rate of boiler operation. Steam and water leaks are an indication of neglect in any boiler room.

Feed-water heaters and purifiers of the open type, which consist of a chamber in which a series of pans are hung (these pans having holes in the bottom, through which the water trickles), need to be cleaned periodically. The pans will collect scale-forming substance from the water, and this can be scraped off when cleaning the heater. In these open heaters, the feed-water and the exhaust steam come into contact, thus warming the water and condensing the steam. Warming the water to as high a temperature as possible causes the lime to precipitate and adhere to the heater pans, which is a great deal better than permitting it to pass into the boiler and attach itself to the tubes. Closed heaters, which are composed of a shell through which exhaust steam circulates, and coils of pipe inside through which feed-water is forced, cannot be so easily cleaned.

Economy in the boiler room can be had only by putting it in charge of an efficient man, because the amount of money saved or wasted depends upon the men directly concerned with the operation of the boilers. Instruments for indicating amount of feed-water used, its temperature, amount of coal used, proportion of ash, temperature of flue gases, per cent of CO_2 in flue gases, and amount of steam generated in each boiler, are all very useful, but must be watched and tested in order not to give false readings.

For example, an apparatus for automatically weighing feed-water indicates, when total amount of water in certain length of time is divided by coal used in that time, an evaporation of nine pounds of water per pound of coal. Now this is good, but supposing that the blow-off of the boiler leaked, and, as sometimes happens, water for sinks is taken from the feed line, and perhaps the feed valve of an empty boiler leaks from the feed line into the boiler, —the water leaking in these places is counted as evaporated from the boilers. Of course that is incorrect.

Now, as to the engine, the first requisite is proper adjustment of the valves, and good condition of valve and valve face surfaces, pistons and cylinders of reciprocating engines. Smoothness of running and cleanliness of engines and room comes next. If an engine knocks, there is usually some trouble which might be fixed, although somes types of engines have an inherent knock or thud which cannot be eliminated.

Sometimes there are cases of neglect in unseen places. The writer will cite one instance of a poor condition of the engine room which could run along indefinitely without being noticed by outsiders: the engine exhausted into an exhaust system where the pressure was supposed to be two pounds above atmosphere, but, due to the fact that there was no drain at the foot of an exhaust pipe which ran up to the room, the back pressure would vary from one to four pounds (due to condensed steam collecting in the exhaust pipe), and in this case it would make a difference of sixty horsepower. This loss did not show, but it was there and working continuously.

All reciprocating engines should be tested by a steam engine indicator at regular periods, and the horsepower calculated. This has a tendency to keep a good adjust-

ment of the engine valves. In the writer's opinion, steam turbines will ultimately replace reciprocating engines in hospitals and like institutions, on account of their simplicity and adaptability to electric machinery. In point of economy, and also quietness of running, the reciprocating engine has the best end of the argument, but economy in use of steam is not necessary when all the exhaust can be used for heating buildings, laundry purposes, or heating water. This can apply at least eight months of the year in almost any hospital, as the power and light requirements are overbalanced by heat requirements in any part of the year when some heat is needed in a building.

One phase of this subject on which much has been already said is the loss of heat from bare and badly covered live steam pipes. This loss is great enough to pay for pipe covering in a short time, and they should be covered, flange joints and all. Frequently, when repairs are made on steam pipes, the covering which has been taken off has not been put on again, and the pipe stays bare, doing business in heat wasting twenty-four hours a day. The care which engines and boilers receive is shown in a measure by the general appearance of the rooms and machinery.

It does not pay to try to run the power plant with too little help, because the machinery is complicated and delicate enough to require proper care if it is going to do that for which it was installed. Many a piece of apparatus has been sent to the junk pile or disconnected and not used because directions as to its proper use were not heeded.

Engines will consume a certain amount of steam per horsepower hour if in good condition, but if allowed to run too long without attention, will use more than necessary. For instance, valves and pistons will wear and leak, and should be examined about once a year. It is not enough to keep the external parts of an engine in order, as the valves and pistons need nearly as much care as the bearings.

This is a broad subject, on which much more might be written, but it is hoped that these general directions for the care of boilers and engines will prove helpful to some readers.

EDITOR'S NOTE—The emphasis laid on the use of turbines is to be questioned. The author's idea is excellent, but the difficulty lies in the fact that the hospital plant involves boiler feed, vacuum and house water pumps, of which desirable forms of the turbine type are not yet obtainable. Consequently reciprocating pumps have to be used, which place more oil into the system than do the reciprocating engines, even though turbines are used in place of reciprocating engines.

STORING YOUR COAL

Hospitals that burn the kinds and sizes of coal that may safely be stored do well to provide themselves with facilities that will make it possible for them to take advantage of the low price ebb of the market in the spring, and at the same time insure themselves an adequate fuel supply.

Not all kinds and sizes of coal can, of course, be safely stored, nor can they be stored without regard to the size of the piles or the surrounding conditions. Any good southern Illinois size coal, however, which does not contain a great amount of duff or fine coal may be stored, and any anthracite or West Virginia Pocahontas coal, if the piles do not exceed ten feet in height and are not stored too close to steam pipes or hot boilers. Franklin County Mine Run can also be successfully stored if the height of the piles is kept under ten feet and the coal is not kept in storage beyond a six months' period. It is well not to store two different kinds of coal together, such as eastern and western coals. The danger from spontaneous combustion is due more to improper separation in piling the coal than to the kind of coal stored. To prevent this combustion coal should be so piled that air may circulate through it freely and thus carry off the heat due to the oxidation of the carbon, or it should be so closely piled that air cannot enter into the pile and oxidize the fine coal. Much of the attempted ventilation of coal piles has been unsuccessful on account of the use of too few ventilating pipes. Where a sufficient number are used and placed close together, successful ventilation results.

Should a coal pile begin to burn as the result of spontaneous combustion, any attempt to quench it with an inadequate amount of water will not prove effective. Water is effective only when it can be applied in sufficient quantity not only to extinguish the fire but to cool the entire mass of coal. The best way to prevent the loss of coal through spontaneous combustion is to inspect and test the pile regularly. If the temperature reaches 150 degrees Fahrenheit, the pile of coal should be carefully watched and if it rises to 180 degrees Fahrenheit, the coal should be removed as promptly as possible. It should then be thoroughly cooled before it is replaced in the bin.

Coal should be stored when it is dry, and care should be taken not to cause excessive breaking. When putting it into the stock bins, wood, paper, greasy waste, and other easily combustible materials should be carefully removed, as all too often they form a starting-point for fire. It is scarcely necessary to remind our readers that coal should not be stored near hot steam pipes because the susceptibility of coal to spontaneous combustion increases rapidly as the temperature rises.

Incidentally, after coal has been delivered, its weight can be checked roughly with the weight tickets furnished by the seller. Assuming that the bin is empty before a new supply of coal is put in, the quantity may be roughly checked by estimating the number of cubic feet of coal delivered. This result when multiplied by the weight of the coal per cubic feet as given below, will give the approximate number of pounds of coal in the bin.

The average weight of a cubic foot of anthracite (hard) coal varies with the sizes into which it is broken and with the kind of coal or the vein from which the coal comes. The latter variation is nearly ten per cent, but the figures given below are the average of several different kinds and will probably represent, within two or three per cent, the average coal purchased. Red ash coal is somewhat lighter than that giving white ashes, hence two sets of values are included in this table.

Average Weight of Anthracite Coal in Pounds Per Cubic Foot

Size	White Ash	Red Ash
Egg	57.0	53.0
Stove	56.5	52.5
Nut	55.5	52.0
Pea	53.5	51.0
Buckwheat	53.0	50.5

The weight of bituminous (common soft) coal varies even more than that of anthracite, depending upon the locality in which the coal is mined. The best figure to use is 47 to 55 pounds per cubic foot.

Accuse not Nature, she hath done her part;
Do thou but thine! —Milton.

The world is a comedy to those who think, a tragedy to those who feel.—Walpole.

News of the Hospitals and Sanatoriums

Hospital superintendents, architects, and others who have an interest in the hospital field, will confer a favor by sending to the Editor of our Department of Hospital News any items of news relating to hospital construction, changes in administrative personnel, the organization of new hospitals, and kindred subjects.

GENERAL

Plans have been drawn for a $150,000 nurses' home to be built shortly by the Seaside Hospital, New York City, N. Y.

A donation of $500,000 has been given the Henry Phipps Institute, Philadelphia, Pa., by the family of Henry Phipps.

The new county tuberculosis hospital at Plainview, N. Y., has been opened and Dr. A. J. Davis is the superintendent in charge.

The Vancouver General Hospital is planning the erection of a new nurses' home and the conversion of the present nurses' home into a maternity hospital. The estimated cost is $500,000.

One million two hundred and fifty thousand dollars will be expended in the erection of the new county home and hospital to be located in Alden, N. Y. The project will be under way shortly.

The Baker Sanatorium, Inc., Lumberton, N. C., will establish a $100,000 general hospital. Fifty thousand has been subscribed by R. D. Caldwell, Horace M. Baker, and Annie Ruth Caldwell Baker.

The 13th annual meeting of the American Home Economics Association will be held at the Antlers Hotel, Colorado Springs, Colorado, from Thursday, June 24th to Tuesday, June 29th, inclusive.

The Israel Hospital of Brooklyn, N. Y., is under construction and will be completed this summer. The cost of building and equipping will be approximately $1,000,000. The hospital will be non-sectarian and will conduct a dispensary for the poor of South Brooklyn.

Four DH-4 army airplanes have been ordered converted into airplane hospital ambulances. Each machine will be equipped with two basket litters for patients and accommodation for a pilot. The design for the model was made by A. V. Veriville, aeronautical engineer at McCook Field, Dayton, O.

The annual report of the New York State Hospital Commission for the last fiscal year discloses the fact that in the thirteen civil state hospitals for the insane, built to house 29,344 patients, 35,579 patients have been housed. This is 21 per cent over their certified capacity. During the year a total of 46,086 patients were treated in these hospitals.

The portable buildings in New York City owned by the Rockefeller Foundation and used for special war purposes have been presented to the New York Association for Improving the Condition of the Poor. They will be transported to Staten Island to be used for health resort purposes. The A. I. C. P. contemplates purchasing a site of eighty acres on Staten Island, and here mothers and children of the city tenement districts will be entertained during the summer, and nursed back to health.

Two bills now pending in the New York Legislature will, if passed, lead to the establishment of a State Psychopathic Hospital at an expenditure of $700,000, $25,000 of which will be appropriated immediately. Plans for the Psychopathic Hospital have been completed by the Hospital Development Commission, with the advice of many building experts. The best features of the Henry Phipps psychopathic clinic, the Boston Psychopathic Hospital, and the Psychopathic Hospital at Ann Arbor, Mich., have been adopted.

The League of Red Cross Societies held its first general council meeting in Geneva, Switzerland, March 2 to 9, inclusive. The delegates assembled at the Hotel de Ville, and held morning and afternoon section meetings for detailed discussions of their separate subjects. A general meeting open to the public was held March 9, under the presidency of M. Motta, president of the Swiss Confederation; M. Georges Milsom gave an interesting talk on the origin, organization, and purpose of the league. During the congress an appeal for relief was received from the countries in central and eastern Europe. The congress decided to undertake the extension of voluntary relief work provided that the League of Nations would assure food, clothing, and transport, for the affiicted peoples.

In recognition of the growing demand for qualified women to fill the increasing number of positions in psychiatric social service, the American Red Cross has decided to provide a few scholarships for specially well qualified nurses who wish to secure the training necessary for this work. Courses in this subject have been established at the more prominent schools of social work in the country, and accepted candidates will be allowed a choice of schools. For admission to these schools, the educational requirement is a college degree or its equivalent. Information regarding the whole field of psychiatric social service with its interesting work, its opportunities for development, its present remuneration, and its various phases of actvity may be obtained by writing to Miss V. M. Macdonald, Organizer of Social Work, National Committee for Mental Hygiene, 50 Union Square, New York City. Nurses who wish for further information regarding the scholarships for this special course of study should apply directly to Miss Elizabeth Fox, Director, Bureau of Public Health Nursing, American Red Cross, Washington.

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